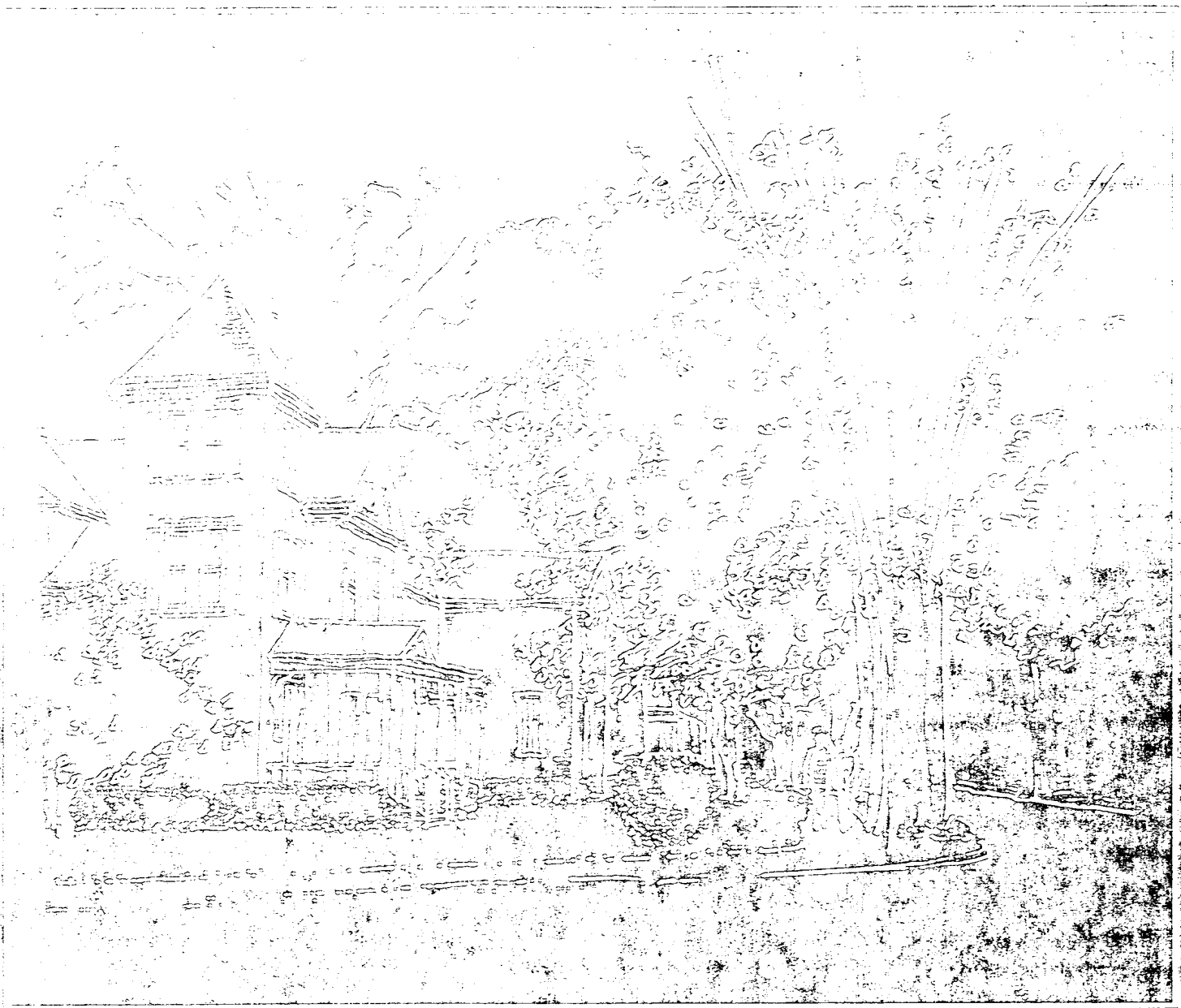


APPROVED AND ADOPTED  
PLANNING AREA 4  
WEST END - WOODLEY GARDENS  
EASTWEST NEIGHBORHOOD PLAN



CITY OF ROCKVILLE, MARYLAND

SEPTEMBER 1989

**APPROVED AND ADOPTED  
WEST END - WOODLEY GARDENS EAST\WEST  
NEIGHBORHOOD PLAN**

An Amendment to the 1970 Master Plan  
for Rockville, Maryland

September 1989

Mayor and Council  
City of Rockville, Maryland

**CITY OF ROCKVILLE  
MARYLAND**

**DOUGLAS M. DUNCAN**  
Mayor

**STEVE ABRAMS**  
Councilmember

**VIOLA D. HOVSEPIAN**  
Councilmember

**JAMES F. COYLE**  
Councilmember



**DAVID ROBBINS**  
Councilmember

**BRUCE ROMER**  
City Manager

**SHARON GRAN**  
City Clerk

**PAUL GLASGOW**  
City Attorney

**LARRY OWENS**  
Chief Planner

Ordinance No. 21-89

ORDINANCE: To adopt the "West End-Woodley Gardens East\West Neighborhood Plan" as an amendment to the adopted Master Plan for Rockville

WHEREAS, the City of Rockville Planning Commission (hereinafter referred to as the "Commission"), under the provisions of Section 3.07 of Article 66B of the Annotated Code of Maryland may recommend adoption of a Plan for the whole or any part of the City, and may recommend adoption of any amendment or extension of or addition to the Plan; and

WHEREAS, pursuant to Section 3.08 of Article 66B of the Annotated Code of Maryland, the Mayor and Council of Rockville did, by Ordinance No. 14-73, adopt, with amendments, the 1970 Master Plan for Rockville as the Plan for the City of Rockville; and

WHEREAS, the Mayor and Council did instruct the Commission in the Master Plan to proceed to formulate and detail individual plans for neighborhoods in the City, pursuant to requirements contained in Section 3.05 of Article 66B of the Annotated Code of Maryland, it being the intention of the Mayor and Council that such plan(s) become an amendment to the Plan for the City of Rockville; and

WHEREAS, the Commission did cause to have prepared, pursuant to the provisions of Article 66B of the Annotated Code of Maryland, a plan for Planning Area 4 and the Coordinated Planning Area entitled "West End-Woodley Gardens East\West Neighborhood Plan" and in preparation thereof did make careful and comprehensive surveys and studies of present conditions and future growth of the West End-Woodley Gardens East\West neighborhood, with due regard to its relation to neighboring property and territory; and

WHEREAS, said "West End-Woodley Gardens East\West Neighborhood Plan," was prepared with the general purpose of guiding and accomplishing the coordinated, adjusted, and harmonious development of a Planning Area 4 and the Coordinated Planning Area and its environs which will, in accordance with present and future needs, best promote the health, safety, morals, order, convenience, prosperity, and general welfare, as well as efficiency and economy in the process of development; including, among other things, adequate provisions for traffic, the promotion of public safety, adequate provision for light and air, conservation of natural resources, the prevention of environmental pollution, the promotion of the healthful and convenient distribution of population, the promotion of good civic design and arrangement, wise and efficient expenditure of public funds, and the adequate provisions of public utilities and other public requirements; and

WHEREAS, The Commission did refer a copy of said "West End-Woodley Gardens East\West Neighborhood Plan" to all adjoining planning jurisdictions, and to all State and local jurisdictions that have responsibility for financing or constructing public improvements necessary to implement the "West End-Woodley Gardens East\West Neighborhood Plan," at least sixty (60) days prior to the public hearing; and

WHEREAS, after preparation of said "West End-Woodley Gardens East\West Neighborhood Plan," the Commission gave notice that a public hearing would be held on said "West End-Woodley Gardens East\West Neighborhood Plan," as an amendment to the Plan for the City of Rockville on April 5, 1989, at 7:30 p.m., in the Council Chamber at Rockville City Hall in Rockville, Maryland, which notice was published in a newspaper of general circulation in the City of Rockville; and

WHEREAS, the Commission and the Mayor and Council of Rockville held a joint public hearing on said "West End-Woodley Gardens East\West Neighborhood Plan," at the time and place provided for in said advertisement; and

WHEREAS, the "West End-Woodley Gardens East\West Neighborhood Plan," as adopted below, makes specific recommendations intended to improve the appearance and function of the West End-Woodley Gardens East\West Neighborhood and shall serve as a guide to public and private actions and decisions to insure the development of public and private properties in appropriate relationships.

NOW, THEREFORE, BE IT ORDAINED BY THE MAYOR AND COUNCIL OF ROCKVILLE, MARYLAND, that the "West End-Woodley Gardens East\West Neighborhood Plan," be and the same is hereby adopted as an amendment to the Plan for the City of Rockville, said "West End-Woodley Gardens East\West Neighborhood Plan" consisting of the publication entitled "West End-Woodley Gardens East\West Neighborhood Plan," Rockville, Maryland, dated June 28, 1989.

\*\*\*\*\*

I hereby certify that the foregoing is a true and correct copy of an ordinance adopted by the Mayor and Council at its meeting of September 11, 1989.

  
\_\_\_\_\_  
City Clerk

1989  
**PLANNING COMMISSION  
ROCKVILLE, MARYLAND**

**JAMES L. VITOL  
CHAIRMAN**

**GLORIA PAUL ATLAS**

**DONALD BOEBEL**

**JERYL GEGAN**



**GLENNON J. HARRISON**

**YOLANDE LANGBEHN**

**NINA WEISBROTH**

*RICHARD L. ARKIN AND PATRICK O. MCGAREY WERE ALSO MEMBERS  
OF THE COMMISSION DURING THE FORMULATION OF THIS PLAN.*

**BRUCE ROMER  
CITY MANAGER**

**LARRY OWENS  
CHIEF PLANNER**

**MARY FITCH, AICP  
PROJECT MANAGER**

**STACY WOOD  
PROJECT MANAGER**

Resolution No. 1-89      RESOLUTION: To approve and recommend the adoption of the West End - Woodley Gardens East\West Neighborhood Plan (Planning Area 4) as an amendment to the Approved and Adopted Plan for the City of Rockville.

WHEREAS, The City of Rockville Planning Commission (hereinafter referred to as the "Commission"), under the provisions of Section 3.07 of Article 66B of the Annotated Code of Maryland may recommend adoption of a Plan for the whole or any part of the City, and may recommend adoption of any amendment or extension of or addition to the Plan; and

WHEREAS, the Commission previously adopted a Master Plan for the City of Rockville, Maryland on July 29, 1970; and

WHEREAS, in accordance with Article 66B of the Annotated Code of Maryland, the Mayor and Council adopted, with amendments, the 1970 Master Plan for Rockville as the Plan for the City on March 5, 1973, by Ordinance No. 14-73; and,

WHEREAS, the Mayor and Council did instruct the Commission through the 1970 Plan to proceed to formulate detailed neighborhood plans for Rockville pursuant to the requirements contained in Article 66B, Section 3.05 of the Annotated Code of Maryland, it being the intention of the Mayor and Council that the final neighborhood plans become amendments to the Plan for the City; and

WHEREAS, the Commission did cause to have prepared pursuant to Section 3.05 of Article 66B of the Annotated Code of Maryland, a plan for the West End - Woodley Gardens East\West neighborhood of Rockville Maryland, to be known as Planning Area 4; and,

WHEREAS, the Commission in preparation of said West End - Woodley Gardens East\West Neighborhood Plan, which corresponds to a major geographical section of the City as defined therein, did make careful and comprehensive surveys and studies of present conditions and future growth within the planning area, with due regard for its relation to neighboring property and territory; and

WHEREAS, the West End - Woodley Gardens East\West Neighborhood Plan was made with the general purpose of guiding and accomplishing the coordinated, adjusted, and harmonious development of a section of Rockville and its environs which will, in accordance with present and future needs, best promote health, safety, morals, order, convenience, prosperity, and general welfare, as well as efficiency and economy in the process of development, including public safety, adequate provision for light and air, conservation of natural resources, and prevention of environmental pollution, the promotion of good civic design and arrangement, wise and efficient expenditure of public funds, and the adequate provisions of public utilities and other public requirements; and

WHEREAS, after the preparation of said West End - Woodley Gardens East\West Neighborhood Plan, as a proposed amendment to the Plan for the City, the Commission gave notice of the time and place of the public hearing to be held on said Neighborhood



Plan as an amendment to the Plan for the City by giving notice in a newspaper of general circulation in the City; and

WHEREAS, the Commission did refer copies of said West End - Woodley Gardens East\West Neighborhood Plan, to all adjoining planning jurisdictions, and to all State and local jurisdictions that have responsibility for financing or constructing public improvements necessary to implement the West End Neighborhood Plan, at least sixty (60) days prior to the public hearing; and

WHEREAS, the Commission and the Mayor and Council held a joint public hearing on said West End - Woodley Gardens East\West Neighborhood Plan in the Council Chamber at Rockville City Hall in Rockville, Maryland, on April 5, 1989; and

WHEREAS, the Planning Commission did take into consideration testimony presented at said public hearing and now desires to present its recommendations as an amendment to the Plan for the City of Rockville, Maryland; and,

WHEREAS, the West End - Woodley Gardens East\West Neighborhood Plan is intended to focus public attention on fundamental aspects of city planning and to present a series of specific action recommendations intended to improve the appearance, design, function, and stability of Rockville's neighborhoods; and,

WHEREAS, the neighborhood planning and development policies recommended in the West End - Woodley Gardens East\West Neighborhood Plan have been closely coordinated with, and represent an extension of development, land use, zoning, transportation, housing, and public facility policy contained in the Plan for the City of Rockville, Maryland;

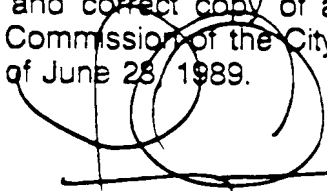
NOW, THEREFORE, BE IT RESOLVED by the Planning Commission of Rockville, Maryland, as follows:

1. That the West End - Woodley Gardens East\West Neighborhood Plan be hereby approved and recommended for adoption by the Mayor and Council of Rockville, Maryland pursuant to Article 66B, Section 3.08 of the Annotated Code of Maryland as an amendment to the Plan for the City of Rockville, Maryland, dated June 28, 1989.

\*\*\*\*\*

We certify that the above is a true and correct copy of a Resolution adopted by the Planning Commission of the City of Rockville, Maryland at its meeting of June 28, 1989.

  
James L. Vitol, Chairman  
Rockville Planning Commission

  
Larry Owens  
Chief Planner

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# CHAPTER ONE



## INTRODUCTION

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## INTRODUCTION

### Boundaries

Planning Area 4 is located in the center of the city between the Town Center and Interstate 270. The area is bordered on the north by the College Gardens subdivision, on the east by the Town Center, on the south by Maryland Avenue and on the west by I-270. Two major roadways pass through the neighborhood: West Montgomery Avenue (Route 28) which bisects the neighborhood, and Great Falls Road (Route 189), which separates the Monument Triangle Area from the rest of the West End.

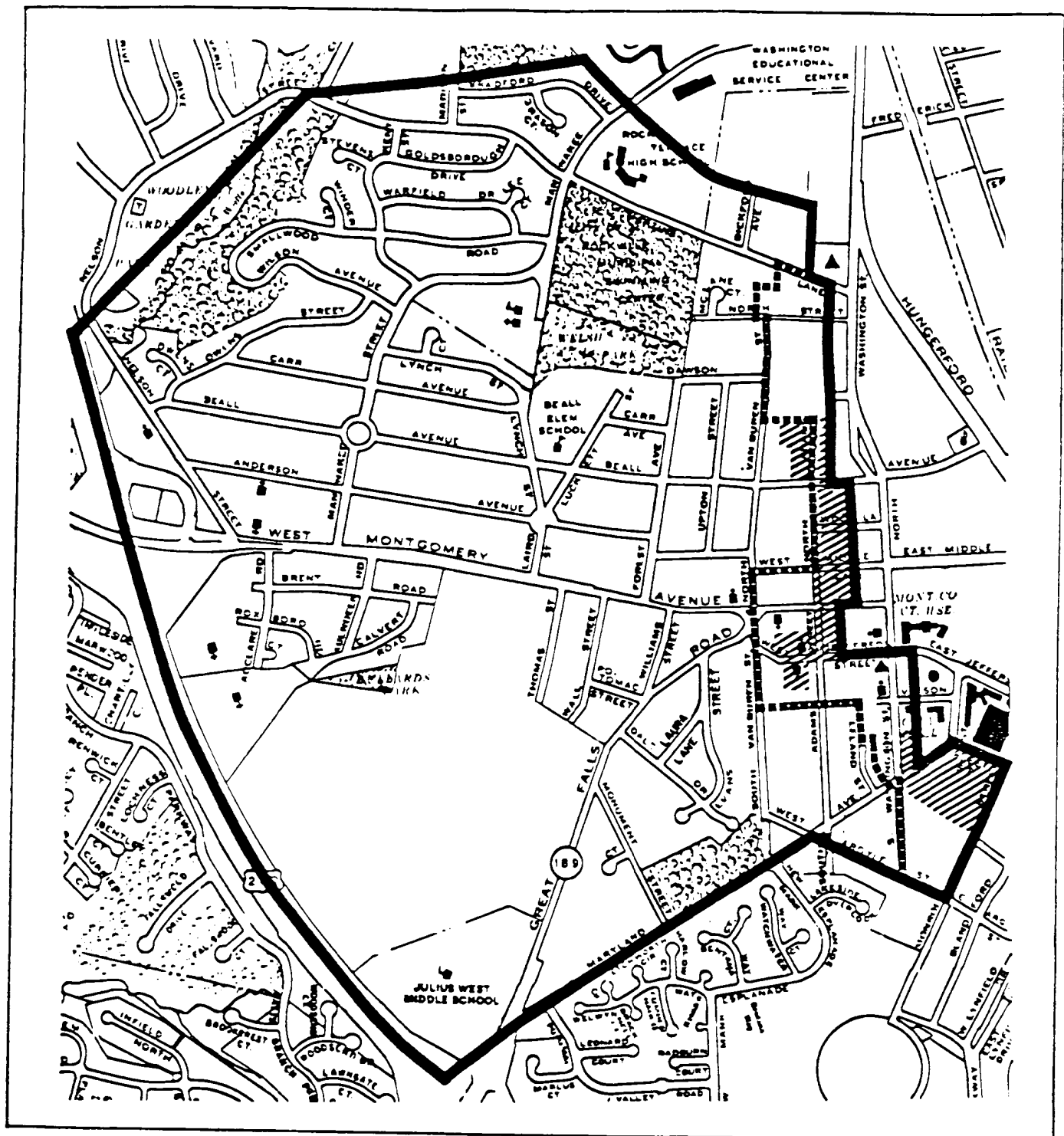
### Development Pattern

Planning Area 4 is the result of several different development patterns. Soon after Rockville was named the Montgomery County seat, lands near what is now North Adams Street were settled by the Beall family. The Beall-Dawson House was the center of a wide expanse of property that extended well to the north toward Martins Lane.

Large lots and farms remained the norm in Rockville until the Baltimore & Ohio railroad connected the City with the rest of the metropolitan area in 1873. With easy access from Baltimore and Washington, Rockville became the focus of intense development interest by developers and speculators. The West End was the site of much of this activity. Subdivisions big and small were created throughout the building boom years during the late 19th century. Elaborate subdivisions such as West End Park and Rockville Heights included plans for wide avenues, lakes and circles. Neither of these subdivisions was completed as planned, but some of Henry Copp's vision for West End Park can be seen along Beall Avenue, Anderson Street and Mannakee Circle.

Other subdivisions during the period included Margaret Beall's subdivision (Harrison Street), Martins Lane/Haiti, Quality Hill (South Adams Street), Higginsville (Great Falls Road), Rebecca T. Veirs Addition (Thomas and Wall streets), and Sarah West McCahill's Addition (Forest Avenue). Later subdivisions filled in the 742 acres that are now Planning Area 4.

Though subdivided, many of the early lots remained vacant until well into the 20th century, giving Planning Area 4 its characteristic mix of architectural styles. Examples of the styles range from the distinctive Victorians of West Montgomery Avenue, Italianate and Greek Revival along West Jefferson Street, and the vernacular houses of Martins Lane to the kit-built bungalow on Anderson Avenue and the more modern split-level houses of Woodley Gardens. Garden apartments, townhouses and senior citizen housing are also recent additions to the area. The result of this patchwork development pattern and variety of architectural styles is a unique neighborhood, recalling both the small town of the past and the growing city of today.



**PLANNING AREA 4** Figure 1

**STUDY AREA**

**LEGEND:**

- STUDY AREA BOUNDARY
- COORDINATED PLANNING AREA (CPA)
- TRANSITIONAL DISTRICT

Planning Area 4 is not entirely residential. The Coordinated Planning Area, which is part of both Planning Areas 4 and 1 (Town Center), includes a variety of commercial enterprises. The Coordinated Planning Area contains buffers, transitional areas and approaches to the higher density Town Center Performance District. This buffer area is intended to prevent unwarranted intrusion of higher density development into the adjoining, stable residential neighborhood. This area also includes a large proportion of historic homes that have been converted to office use.

Institutional uses are numerous within the West End. The Planning Area supports 97 acres of institutional uses, including nine places of worship, two nursing homes, two private schools and a temporary homeless shelter. The largest institutional use is Chestnut Lodge Hospital, an extended care psychiatric facility that covers 113 acres at the southern end of the planning area.

Most commercial uses that serve the West End are located just east of the Coordinated Planning Area Boundary. These uses include grocery, convenience shopping and personal services.

Planning Area 4 also includes approximately 45 acres of park land. A variety of recreational facilities are provided from passive parks to ballfields, tennis courts and public swimming pools.

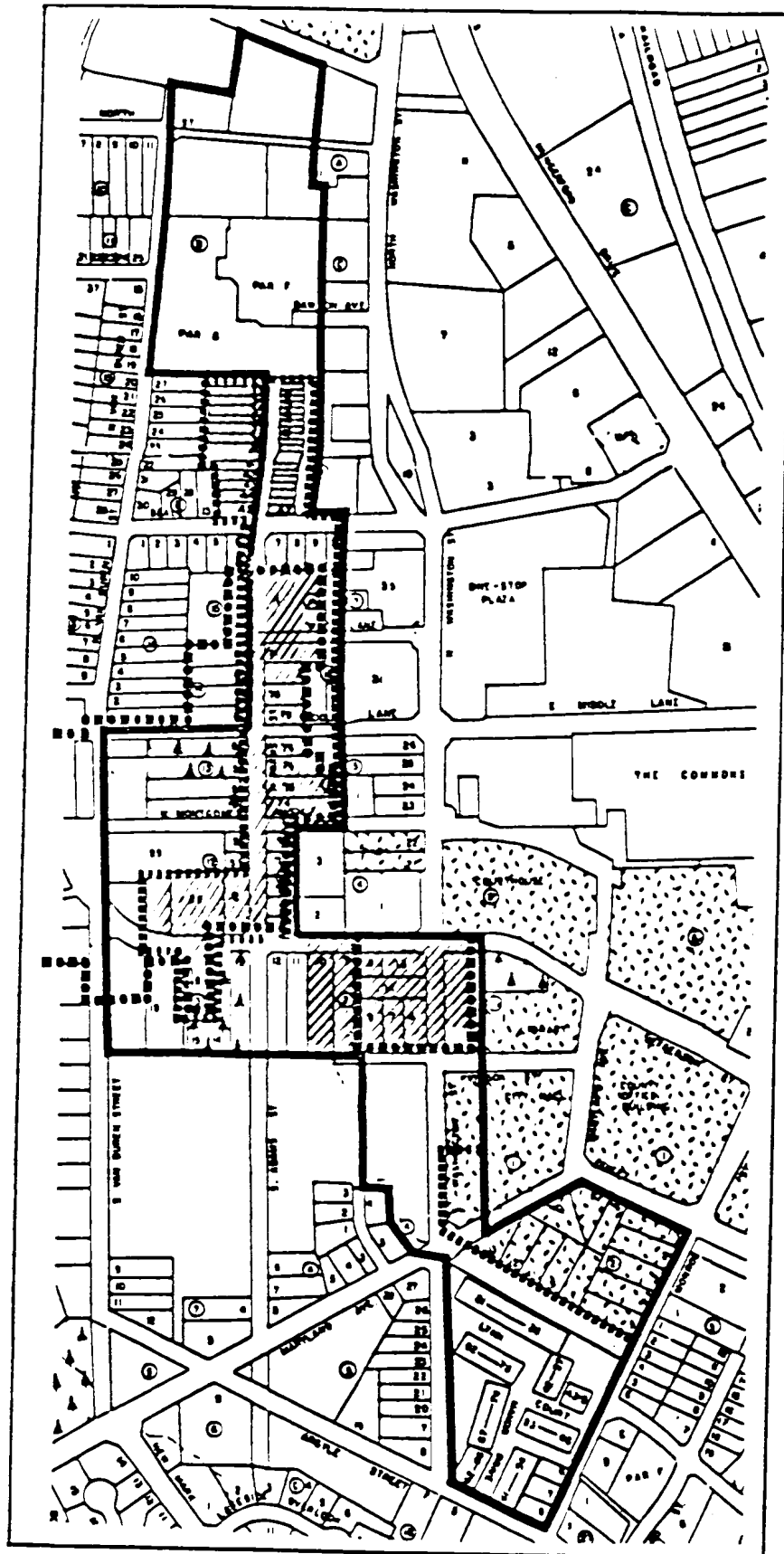
#### Population Characteristics

In September 1986, a survey was distributed to all Planning Area 4 residents. A total of 646 surveys (46% of those distributed) were returned to the Planning Department and tabulated by the University of Maryland Survey Research Center.

The survey results showed that the population of Planning Area 4 is primarily adults of working age, 20-59 years old. The next largest population is that of people 60 or older. More children between the ages of 5 and 14 live in the neighborhood than those in the younger age group (between birth and 5 years). Teenagers, ages 15-19, make up the next largest age group. The largest percentage of residents has lived in the neighborhood 11 to 20 years. The next largest group has lived in the neighborhood 3 to 10 years. The majority of residents plan to continue to live in the area for 5 years or more.

Ninety percent of the respondents are home owners. Most have jobs in the professional or managerial sectors, located primarily in Rockville and Montgomery County. The average household income was reported to be between \$50,000 and \$100,000 per year.

This data suggests that the West End/Woodley Gardens planning area is a stable community where most residents are home owners and plan to stay for some time. The area is populated primarily by families with school-age children, though a large proportion of senior citizens are also present. The group which appears to be under represented is "new" families. People just beginning families may not have the incomes that might make home ownership in this area possible. While the data suggests stability because



# PLANNING AREA 4

Figure 2

## COORDINATED PLANNING AREA

(EXISTING CONDITIONS)

### LEGEND:

— COORDINATED  
PLANNING AREA (CPA)

----- TRANSITIONAL  
OFFICE DISTRICT

▨ HISTORIC DISTRICT

LAND USE  
(Shown within CPA only)

▤ PUBLIC

▴ PARK

▨ OFFICE

□ RESIDENTIAL



of the broad mix of age groups in the working years, the attraction of singles and new families is important for the continuing stability of the neighborhood in the future.

### Environmental Characteristics

A portion of Planning Area 4 is located at the highest elevation in the City of Rockville, 470 feet above mean sea level near South Washington Street. The western side of this elevation, comprising most of the planning area, drains into the Watts Branch watershed. A small part of the planning area is located to the east of the highest point and drains into the Rock Creek Basin.

To the west of the highest elevation most of the land ranges between 400 and 425 feet in elevation and is characterized by a gentle slope. The soil is generally a silt loam, a soil that has moderate drainage capability, but has likely been significantly eroded by the development of the area. The standards now used for sediment control and storm drainage were not used when much of the West End was developed. Another factor in the erosion of this soil has been the lack of storm water management along the tributaries of Watts Branch which run through Woodley Gardens, near Bullard's Park and just north of Julius West Middle School on the Chestnut Lodge property.

There are two environmental conditions in the Planning Area that might constrain the type of development that may occur in the future. Noise from Interstate I-270 and surrounding arterial roads makes careful site planning and buffering important development criteria. In addition, small wetland areas at the northern and southern edges of the I-270 frontage of Chestnut Lodge must be preserved or replaced if that area is developed.

### Planning Issues

Many of the characteristics that make the Planning Area a unique community also create its most significant planning problems. For example, streets laid out in the 19th century were not planned for 20th century traffic. The close proximity of the Town Center and I-270, which make the Planning Area so convenient for its residents, also make it convenient for commuters. Use of the Planning Area by commuters limits the flexibility of residents to use alternate forms of local transportation such as walking and bicycling. In addition, older housing built in the 19th century needs careful maintenance that is often quite expensive.

### Planning Process

The West End - Woodley Gardens East\West Neighborhood Plan (which, for convenience will be referred to as the "West End Plan" throughout this document) is part of the City's effort to update the 1970 Master Plan. The fundamental purpose of the Master Plan is to provide a framework for making Rockville the best possible residential community. The desire for a stable community is strongly supported by the 1970 Master

Plan goal on preservation of established neighborhoods. This goal states:

**Established neighborhoods will be maintained in their predominant residential character and protected from intrusion of unwarranted traffic and blighting influences of commercial, industrial, and incompatible non-residential development.**

Neighborhood plans integrate local concerns with long-range planning policies and city-wide programs. Community involvement in the process has been active and continuous. In 1986, the Planning Commission appointed 41 members of the West End - Woodley Gardens community to serve as a Neighborhood Planning Advisory Group (NPAG). In meetings throughout the latter part of 1986 and the first half of 1987, the NPAG prepared a report for the Planning Commission to advise it of the neighborhood's concerns and recommendations. The Final Report was presented to the Commission in September 1987. The Staff presented an evaluation of the NPAG Report to the Commission in February 1988. The following month the NPAG, area civic associations, the Historic District Commission and the Traffic and Transportation Commission participated in a Public Forum to comment on the Report and the Staff Evaluation.

The Planning Commission and the NPAG had their first joint worksession in May 1988 to discuss issues raised by the report, the staff evaluation and the forum. This plan is the result of those worksessions and a joint public hearing, attended by both the Commission and Mayor and Council in April 1989. After careful evaluation of each issue, the Planning Commission voted on policies and strategies that form the basis of this plan. These policies fall into two general categories which form the thematic goals of the West End Plan:

- 1. Preserve and maintain the integrity of Planning Area 4 as a residential community.**
- 2. Improve the quality of life in Planning Area 4.**

The following chapters on community facilities, land use and circulation include the current conditions in the area and the policies and recommendations which will maintain and improve the West End community.

## CHAPTER TWO



# COMMUNITY SERVICES

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## COMMUNITY SERVICES

*The most brilliant Master Plan, buttressed by sensitive zoning decisions to carry it out, would amount to less than nothing in the eyes of the residents if the result was a neighborhood which was not clean, not maintained, and not attractive...*

—NPAG Final Report

In a newly-built neighborhood, city services might easily be taken for granted. One could expect streets of standard width with sidewalks on either side and curbs that would carry storm water away from the neighborhood. Newly-clad or painted houses would line well-lit streets where debris would be removed periodically by street sweepers and trash trucks.

Part of the West End's charm, however, is that it is not standard. Some streets have sidewalks, some do not. Some streets are standard width, others are not. The earliest house built in the West End was begun in 1797, but new houses continue to be built on infill lots within the neighborhood. City services must, therefore, be flexible and adapt to the needs of the older sections of West End, as well as the new.

In the neighborhood survey conducted in 1986, City services generally received good marks from residents. Most thought that the services provided by the City were good to excellent. Given the age of the housing stock and variety of uses included in the planning area, however, several areas will need further improvement to maintain the quality of life now enjoyed by its residents. These are discussed below with recommended policies for improvement.

### Police Services

Police services within the City of Rockville are handled by two complementary forces, the City and Montgomery County police departments. In addition to law enforcement activities, the City police force is responsible for park security, animal control, traffic control, and burglary prevention. The results of the West End Survey show that over 90 percent of the residents felt safe or somewhat safe in their neighborhood. In addition, most rated the protection offered by the two law enforcement agencies as good.

Traffic law enforcement received mixed reviews: 40.7 percent of residents were dissatisfied with the traffic enforcement in their neighborhood. A total of 42 percent of residents felt that traffic laws are not generally obeyed. It is, therefore, recommended that:

**The West End Community be provided with adequate police protection to enforce all applicable laws, especially with regard to traffic.**

Parking in the West End is not a problem at present but could become one in the future as development of the Town Center proceeds. As people search for new places to park, the residential areas at the edge of the Town Center might prove tempting. Therefore:

**A parking permit district is recommended for this area in the event that commercial parking becomes a problem in the neighborhood.**

Animal Control. Many respondents to the survey mentioned that the control of dogs and cats in the area has become somewhat lax. It is therefore recommended that:

**The City provide adequate control of all domestic animals as defined in the City ordinance.**

#### Licenses and Inspection

Upkeep is a significant issue in an older neighborhood. Neglect can be extremely hazardous to older houses and repairs are often very expensive. Approximately 65 percent of the neighborhood felt that the City's housing code enforcement was good to excellent. Almost 35 percent, however, felt there was need for improvement. The method of inspection, which relies on citizens reporting the infractions of their neighbors, was questioned by some of the residents. Also troublesome was the number of rental properties in the neighborhood that are not inspected by the City. The following policy is therefore recommended:

**The City should implement a systematic inspection schedule and code violation tracking system for the West End which would serve as a model for the rest of the city. This system would include:**

- o **A notice of infraction and a reasonable period for its correction based on the nature of the infraction;**
- o **A system to identify all single and multi-family rentals; and,**
- o **The provision of information regarding low cost loans, grants, materials and services.**

Noise. The City has a noise control law. Monitoring and enforcement of the law is carried out by the Montgomery County Department of Environmental Protection. The major noise source for the community is Interstate 270, which forms the Planning Area's western boundary. Because the road is part of the interstate highway system the federal and state governments are responsible for achieving standards of acceptable noise levels. As a part of its effort to widen I-270, the State Highway Administration has placed noise barriers adjacent to areas already improved with single family housing where acoustic analysis indicates that noise levels would exceed recommended levels of sound (County standard is 65 dB(A)) for residential use.

At the present time, none of the West End I-270 frontage contains single family housing. From north to south this frontage includes: a church, a nursing home, the vacant Chestnut Lodge tract and the Julius West Middle School. The State did not place sound barriers near the Church since it is used in off-peak hours and its air conditioning/heating system masks much of the noise. The nursing home is a sealed structure; therefore, the sound levels within the building are within appropriate guidelines for its intended use. No barriers were placed at the Chestnut Lodge tract, although it is recommended for residential development, because the site was vacant at the time the road was widened and the noise walls were built. The sound level at Julius West Middle School was determined to be within an adequate range for its use. The Montgomery County Public Schools Board of Education later decided to build its own berm using materials donated by the State.

It is a policy of this City that citizens have the right to the peaceful enjoyment of their property whether they live in a house, rental apartment or special facility such as a nursing home. It is, therefore, recommended that:

**Negotiations be entered into with the State to add noise attenuating devices along I-270 adjacent to the nursing home, the churches and the schools.**

Appendix A lists noise attenuating devices including barriers, special landscaping, building materials and sensitive site design that could be used for development of the vacant property in the Planning Area.

#### Recreation and Parks

The Recreation and Parks Department has a number of facilities within Planning Area 4. The largest is Welsh Park which contains the Rockville Municipal Swim Center. The smallest is Mannakee Circle, a passive park located at the intersection of Beall Avenue and Mannakee Street. Table 1 shows the facilities available to West End residents.

According to the survey, most West End residents feel that the quality of the parks in their neighborhood is good to excellent. The following policy is recommended to protect these resources:

**Ensure that neighborhood parks are lighted and maintained in a safe and attractive manner, including the timely removal and replacement of dead or unsightly landscaping and damaged or outdated equipment.**

#### Public Works

The Public Works Department is responsible for the majority of public services that directly affect residents. Refuse collection, water and sewer utilities, street maintenance,

**Table 1**  
**Park Facilities in Planning Area 4**

	WELSH	MONUMENT	BULLARD'S	FRIENDS	MANNAKEE CIRCLE	ROCKVILLE ACADEMY PARK
BALL FIELDS	•	•				
GENERAL PLAYFIELDS	•	•	•			
TOT PLAYGROUND	•	•	•			
CHILDREN'S PLAYGROUND	•	•	•			
TENNIS COURTS	•					
BASKETBALL COURTS	•		•			
FITNESS COURSE	•					
VOLLEYBALL COURTS	PLANNED					
POOL	•					
PICNIC AREA	•	•	•			
WOODED TRAILS	•	•				
FLOWER BEDS	•			•	•	
BENCHES				•	•	
ACREAGE	32.7	8.1	2.9	.7	.5	1.06

lighting and storm water management are just a few of Public Works neighborhood responsibilities.

Many of these elements were concerns of the West End residents. Much of the Planning Area was constructed prior to World War II. Consequently many streets do not have the curbs and gutters necessary for effective storm drainage or street maintenance. Effective street lighting is important if other objectives such as increased pedestrian activity and a designated bikeway (discussed more fully under Circulation) are to be achieved.

The following recommendations seek to improve these services in the West End:

**All streets in the Planning Area should be properly cleaned and maintained to City standards to serve as a model for the rest of the City.**

**A safe street lighting system for vehicles as well as pedestrians should be installed and maintained to City standards. Special needs of elderly and handicapped residents should be considered.**

**For reasons of safety and storm water management, all streets in the planning area should have curbs and gutters as is made feasible by the topography, street design and sidewalk configuration.**

Water quality and water pressure seem to be continuing problems in the older sections of the West End. In the past, sediment from clay pipes has appeared in residents' taps. Simultaneous use of appliances on different levels of the house could sometimes reduce the flow of water to a tiny trickle.

The City is replacing or relining much of the worn equipment to improve water service in the West End. The six-inch water main in West Montgomery Avenue was relined to prevent sediment from entering individual taps. A ten-inch water line in Great Falls Road has additional capacity so that any new development in the area will not overburden the water supply. From time to time residents should check their own connections to the City water supply to ensure that their own pipes can accommodate a full supply of water. The following policy is recommended to maintain and improve the quality of water in the community:

**The City operates and maintains a healthy, clean and safe water system to serve the purposes of human consumption, sanitation and fire protection and where this is not the case, the system should be upgraded.**



## Implementation

The foregoing policies seek to improve city services in the West End. In a practical sense, however, these policies are incomplete without a method to implement them. Table 2 shows a list of agencies responsible for the policies recommended in this Chapter. Upon approval and adoption of this plan, these agencies will be responsible for preparing strategies to implement the policies. The Planning Department will be primarily responsible for coordinating this effort and assembling these strategies into the implementation document.

**TABLE 2  
COMMUNITY SERVICES IMPLEMENTATION RESPONSIBILITIES**

RESPONSIBILITIES	ANIMAL CONTROL	LICENSES AND INSPECTION	PARKS	PLANNING	POLICE	PUBLIC WORKS	OTHER
POLICE PROTECTION					•		MONTGOMERY CO. POLICE
ANIMAL CONTROL	•						
REVISED INSPECTION SYSTEM		•					
PARKING DISTRICT					•	•	
PARK MAINTENANCE			•				
STREET CLEANING						•	
STREET LIGHTING						•	
CURBS & GUTTERS						•	
WATER SYSTEM MAINTENANCE						•	
NOISE		•		•			STATE HIGHWAY ADMINISTRATION COUNTY DEPT. OF ENVIRONMENTAL PROTECTION

## CHAPTER THREE



# LAND USE

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## LAND USE

*The only constant in life is change. And so it goes with neighborhoods.<sup>1</sup>*

The land use pattern in Planning Area 4 reflects the many changes that have occurred in this area from its settlement as a farming community in the 18th century to the well-established residential neighborhood bordering a growing commercial area that it is today. There are forces in motion now that may cause the neighborhood to change still further. The installation of a new interchange at Great Falls Road and the reconfiguration of the interchange at West Montgomery Avenue will make the Town Center more accessible. As accessibility increases, so too will development interest in the Town Center and other areas affected by improved highway access. How will these changes affect the West End? Anticipating the impacts of change and managing those that may present liabilities is the theme of this land use chapter.

This chapter is divided into two sections. The first will review current land use and zoning. The second section will suggest changes in land use and zoning that will ensure the quality of the neighborhood for the future.

### Existing Land Use

Figure 3 illustrates the land use pattern in Planning Area 4. The primary land use is detached residential, with more of that category in medium density (2.5 - 4 units per acre) than high density (over 4 units per acre). Public and private institutional uses make up the next largest category of land use in the planning area. Attached residential is planned for the eastern border of the Planning Area near the Town Center Performance District.

The east end of Planning Area 4 includes two overlay districts that link it to the Town Center: the Coordinated Planning Area (CPA) and the Transitional District. The Coordinated Planning Area lies in both Planning Area 4 and Planning Area 1, the Town Center. Its placement in both these planning areas acknowledges the overlapping interests of these areas and recognizes the need to protect the stable residential area from the high density development planned for the Town Center.

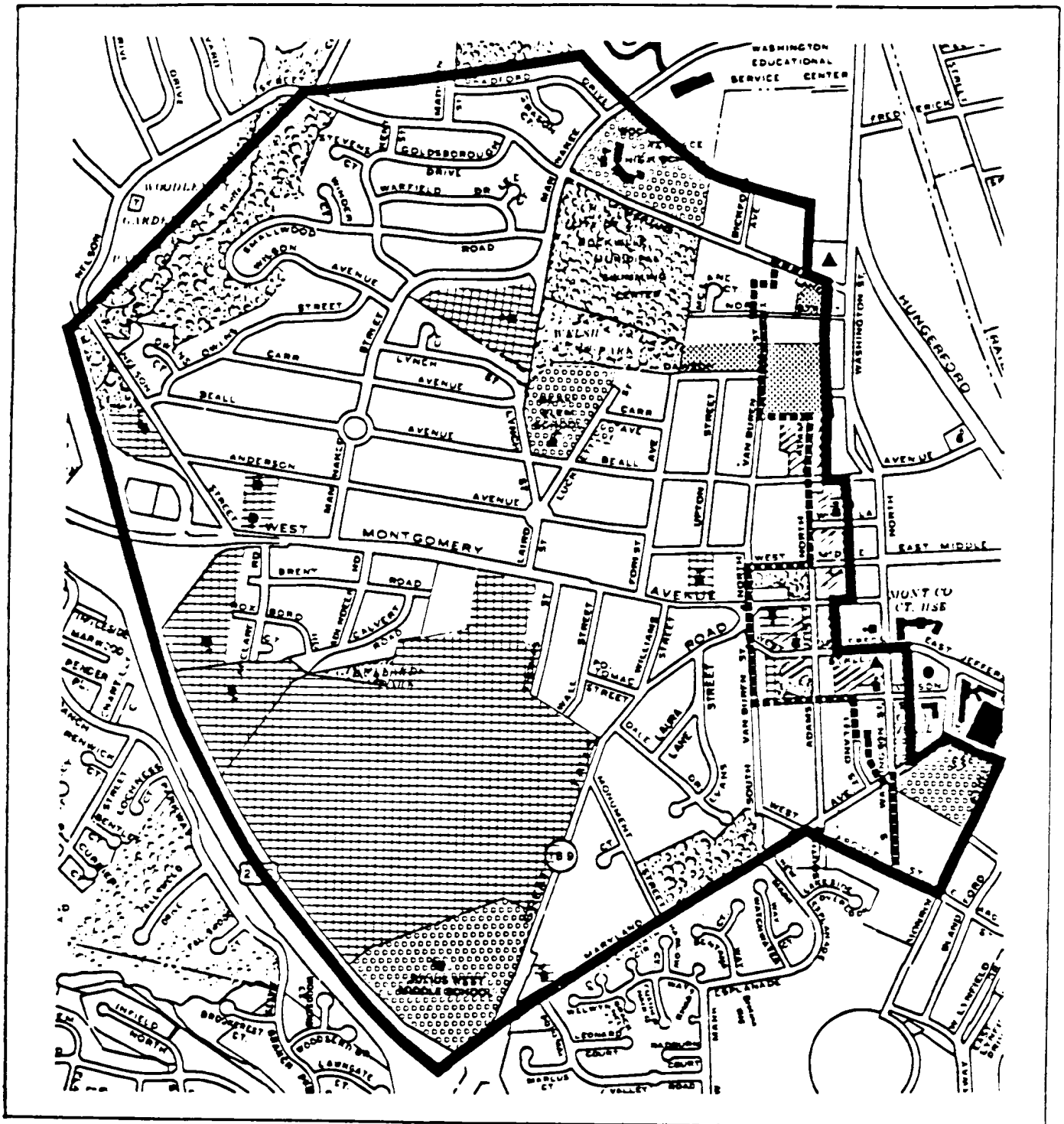
The Transitional District is a smaller area that lies within the CPA. The Transitional District is an area that forms a transition in space and use between the Town Center and the established residential neighborhoods. Within this district, O-2 zoning may be obtained to permit the conversion of existing structures to office use or the construction of new office buildings at residential scale.

### Current Zoning

Current zoning (Figure 4) generally reflects the adopted land use plan. The O-2 zoning on the east end of the Planning Area corresponds with the transitional district

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<sup>1</sup> Clifton W. Henry, Remarks, APA MidAtlantic Conference, October 27, 1988.



**PLANNING AREA 4** Figure 3

## CURRENT LAND USE

### LEGEND:

- |   |   |
|---|---|
|  OFFICE  |  PUBLIC        |
|  SINGLE FAMILY<br>RESIDENTIAL<br>ATTACHED/DETACHED |  PARK          |
|  MULTI-FAMILY<br>RESIDENTIAL                       |  INSTITUTIONAL |

previously described. The rest of the zoning is primarily single family residential: R-60 in the older sections and R-90 in the areas built since 1975. Chestnut Lodge and the Buckingham property, both located on West Montgomery Avenue, are zoned R-S, one-half acre zoning.

The West Montgomery Avenue Historic District is an overlay district which includes buildings deemed by the City to be of historic and architectural value. Many houses constructed during the 1890 building boom are located here, though some structures date from as early as the 1790s. The Historic District Commission reviews requests to modify or restore properties located within the district. This overlay district ensures that properties maintain their integrity and value as historic resources.

### Land Use Proposals

While the current land use plan and zoning seem to reflect the existing conditions well, concerns expressed throughout the planning process suggest that there is a need to strengthen or change some of the land use recommendations of the Master Plan. Of particular concern is the continuing encroachment of non-residential uses into the residential neighborhoods of the planning area. New development in the Town Center may create more traffic at the same time that the traffic network is improved to make the area more accessible. Residents fear that this accessibility will be accompanied by pressure for more non-residential development within the neighborhood.

Good land planning actions weigh the wishes of an individual neighborhood with the recommendations of the Master Plan and the needs of the City. Each of the recommendations listed below was developed using this process. Looking at the neighborhood in a city-wide context ensures that the neighborhood plan is consistent with the goals and trends in the city at large. A city-wide view also provides insight into the critical border areas; for example, how the recommendations of this plan influence the recommendations of other plans that have preceded it, such as the Town Center and the protection of residential areas advocated in the 1982 plan for Planning Area 3.

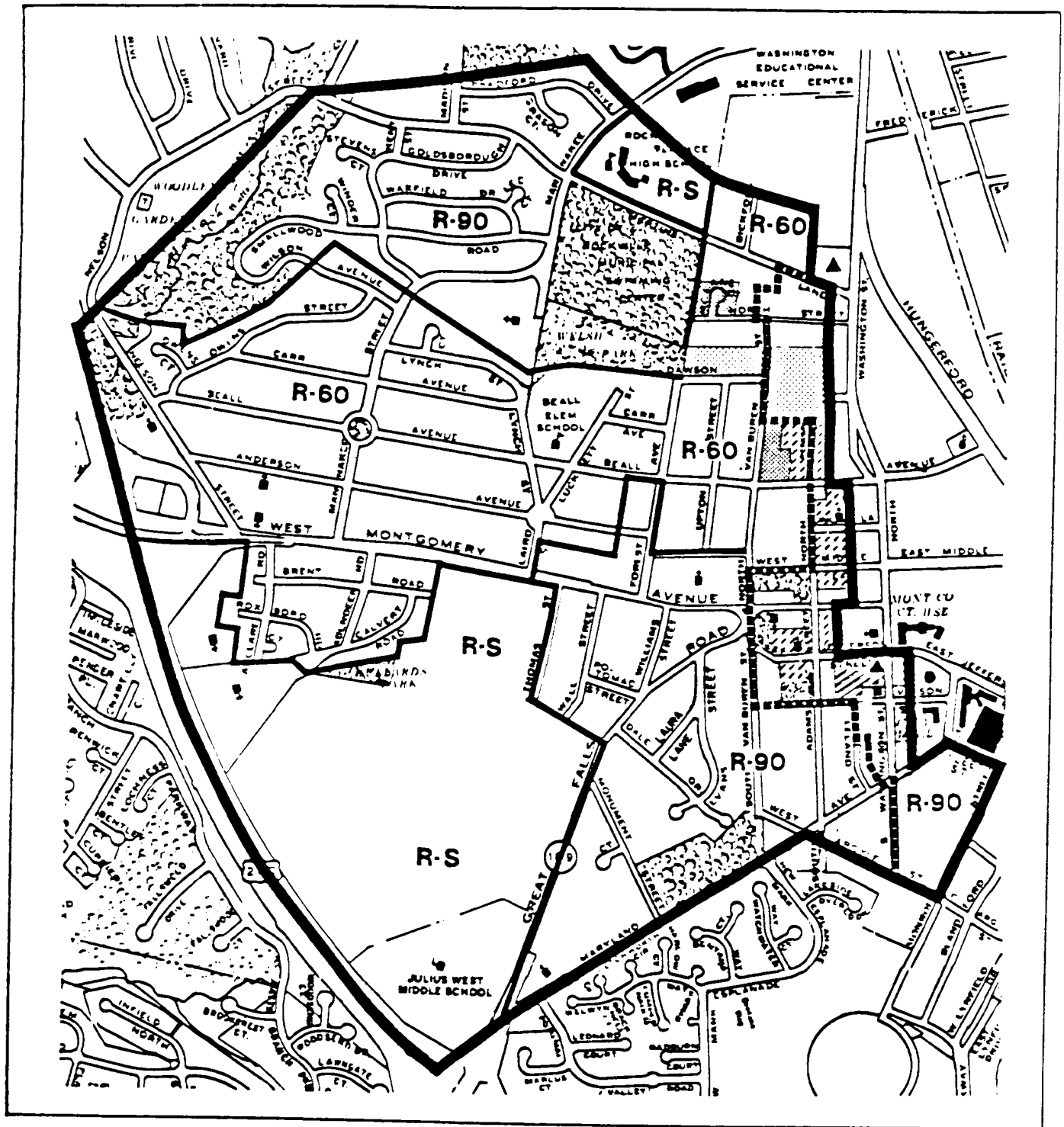
The thematic goals of this plan are reprinted below with the land use objectives that guide this chapter.

#### **PRESERVE AND MAINTAIN THE INTEGRITY OF PLANNING AREA 4 AS A RESIDENTIAL COMMUNITY.**

**Objective:** Prevent expansion of non-residential uses that would diminish the character of the neighborhood.

#### **IMPROVE THE QUALITY OF LIFE IN PLANNING AREA 4.**

**Objective:** Expand the housing mix to make the area more accessible to new families to stabilize the neighborhood and the school population.



## PLANNING AREA 4

Figure 4

# CURRENT ZONING

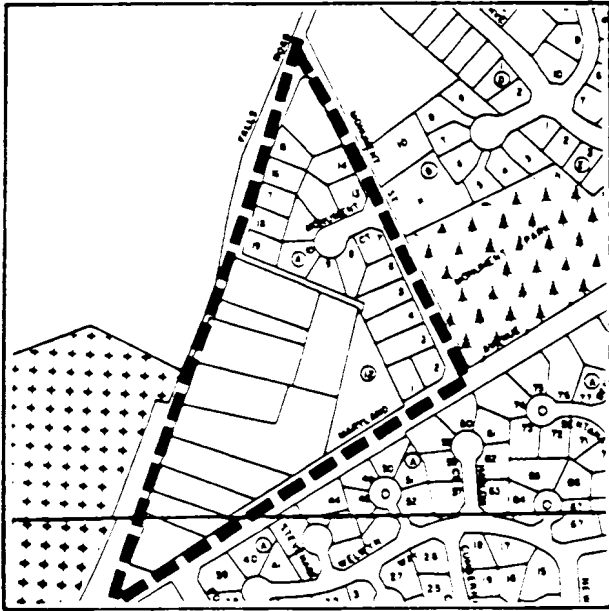
## LEGEND:

- D-2 TRANSITIONAL OFFICE
- R-60 SINGLE FAMILY DETACHED RESIDENTIAL
- R-80 SINGLE FAMILY DETACHED RESIDENTIAL

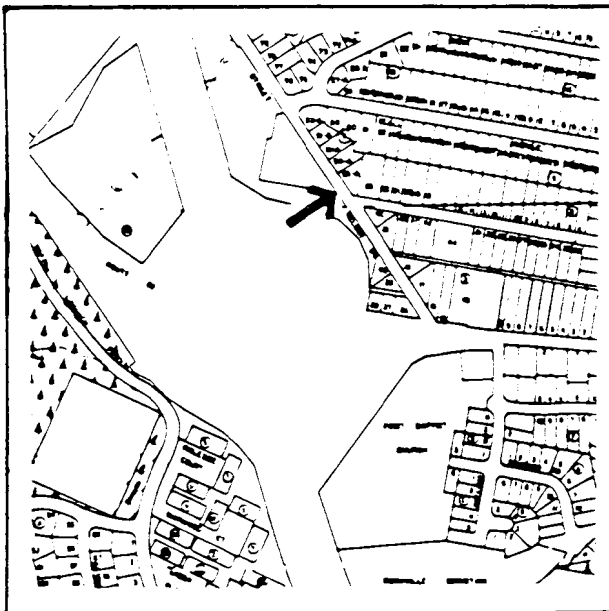
- D-1 OFFICE BLDG.
- R-S SINGLE FAMILY DETACHED RESIDENTIAL
- R-30 MULTI-FAMILY RESIDENTIAL
- R-40 SINGLE FAMILY SEMI-DETACHED RESIDENTIAL

Though each of the land use recommendations listed below addresses a specific site, it should be noted that these individual recommendations work together to improve housing opportunities in the area and reduce the impact from adjacent commercial establishments. While some of these recommendations propose the conversion of property for office use, it is supported only within a very limited area that already includes such uses. This plan does not recommend the expansion of this limited area, nor does it recommend the rezoning and conversion of new sites for non-residential use.

### Specific Recommendations



**1A. Monument Triangle**

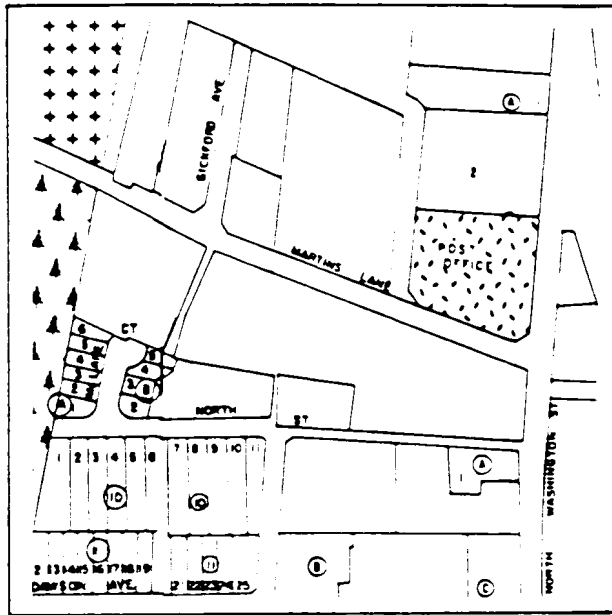


**1B. Nelson Street**

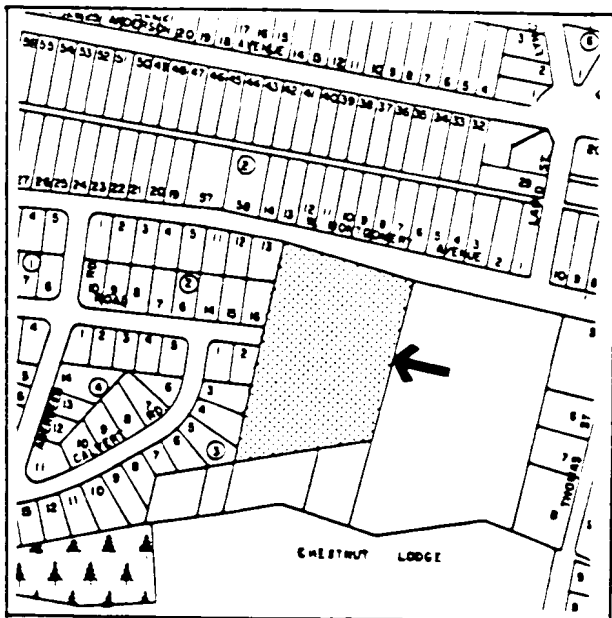
1. An overriding policy of this land use plan is to preserve and maintain the residential areas in the West End. This goal needs special emphasis in areas where changes in the road network make encroachment possible. The highway interchanges at Great Falls Road and Route 28 present such possibilities. This plan therefore recommends that:

**The residential character of the Monument Triangle and Nelson Street neighborhoods shall be maintained by preventing commercial encroachment and supporting residential use for vacant land.**

2. While most of Planning Area 4's history reflects the fortunes of its white residents, this area is fortunate to include one of the few black kinship communities left in Maryland. The Haiti (HAY-TIE) community, located at the northernmost boundary of the Planning Area along Martins Lane, began in 1830 with Samuel Martin, a free black who had a large farm on the north side of Martins Lane. The south side of the street was owned by the Beall family, but was gradually sold off to former slaves and servants. Throughout the 19th century, portions of the property were split off for later family members, creating an informal or "crazy quilt" land pattern. The community continued to grow in the 20th century along North Street and Bickford Lane.



## 2. Martins Lane



## 3. 522 W. Montgomery Ave.

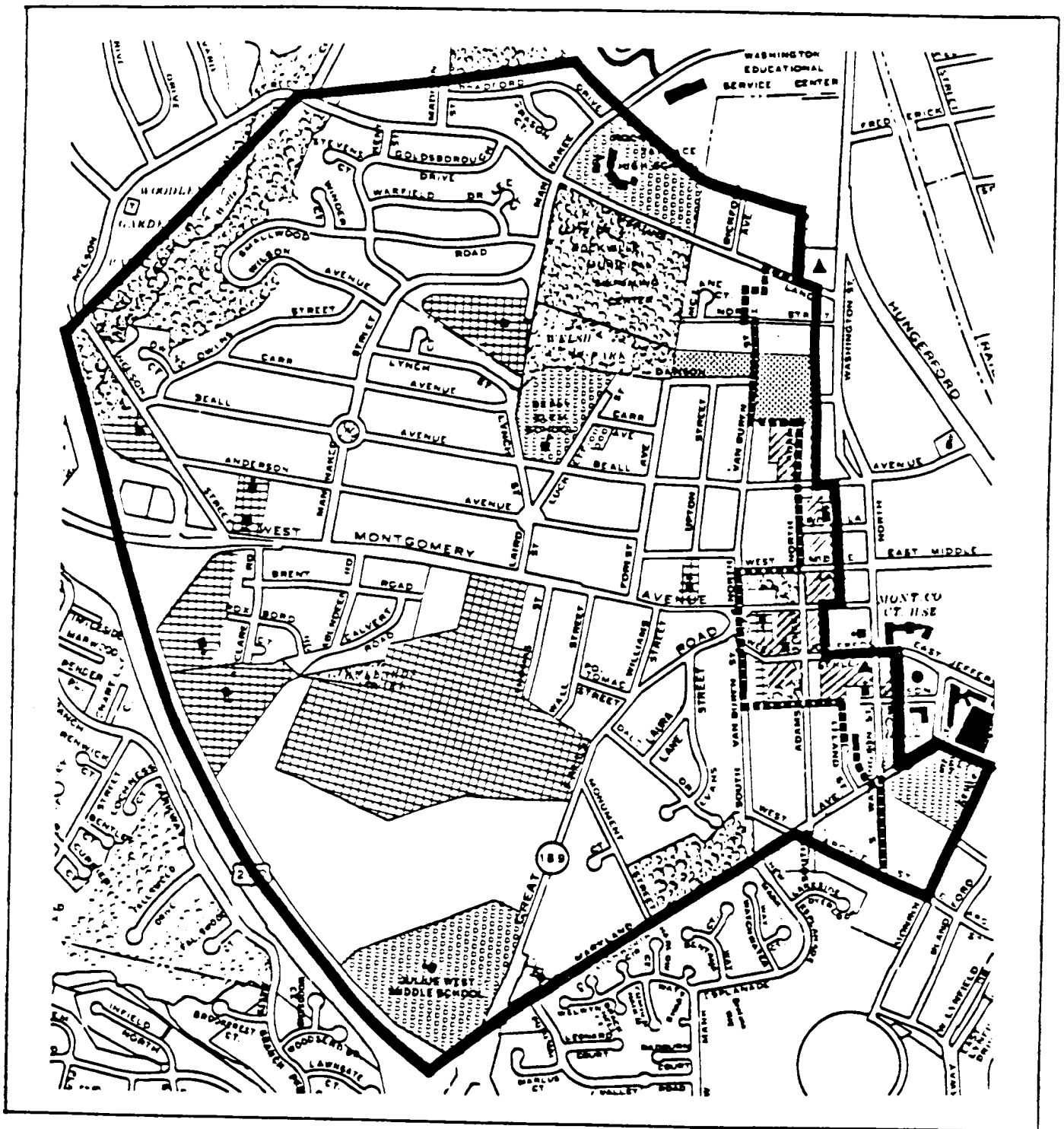
This area is important not only for its historic architecture, but for the historic ties that still bind this community together. Both the architectural and cultural heritage of this area are threatened by the proximity of the Town Center. The relatively large lots located here present development opportunities not possible in other areas of the West End. In addition, the vernacular housing located on these lots is not perceived as historically or architecturally significant by the general public. Finally, townhouse use recommended by the Master Plan covers some of the historic single family lots. It is the recommendation of this plan, therefore, that:

The City should foster and support a broader understanding of the unique historical and architectural characteristics of the Martins Lane/Hall Community. This support should include strategies that would enhance the kinship community and the historic properties that lie within it and reflect the wishes of the community and individual landowners. In addition, new townhouse development in the area should be compatible with the community in terms of site design and orientation.

3. A four-acre site at 522 West Montgomery Avenue has been owner-occupied since early in the century. The site is zoned R-S (one-half acre lots) which is a lower density than is characteristic of the surrounding neighborhood. Should this site be subdivided, this plan recommends that:

The site at 522 West Montgomery Avenue shall be zoned in a density compatible with the surrounding neighborhood and that the wooded











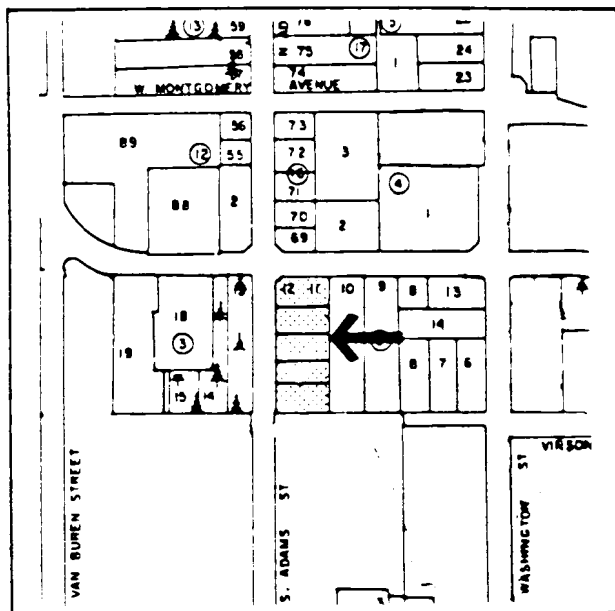
## PLANNING AREA 4

Figure 5

# PROPOSED LAND USE

## LEGEND:

- |   |   |
|---|---|
|  OFFICE  |  PUBLIC        |
|  SINGLE FAMILY<br>RESIDENTIAL<br>ATTACHED/DETACHED |  PARK          |
|  MULTI-FAMILY<br>RESIDENTIAL                       |  INSTITUTIONAL |

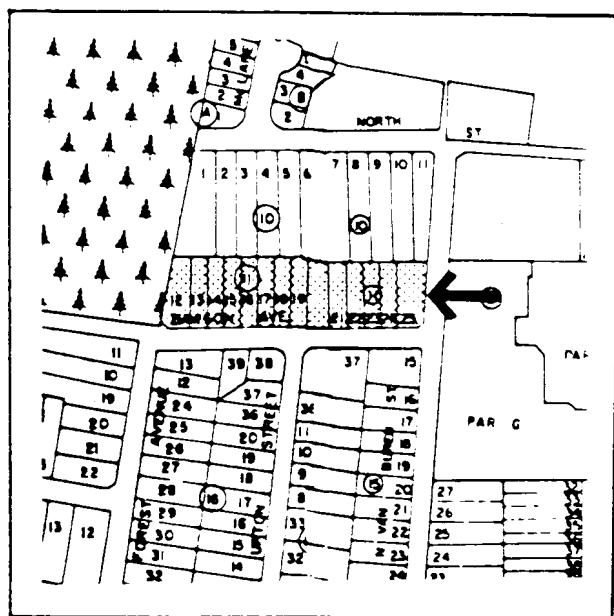


4. 100-110 S. Adams St.

character of the site will be preserved through careful site planning.

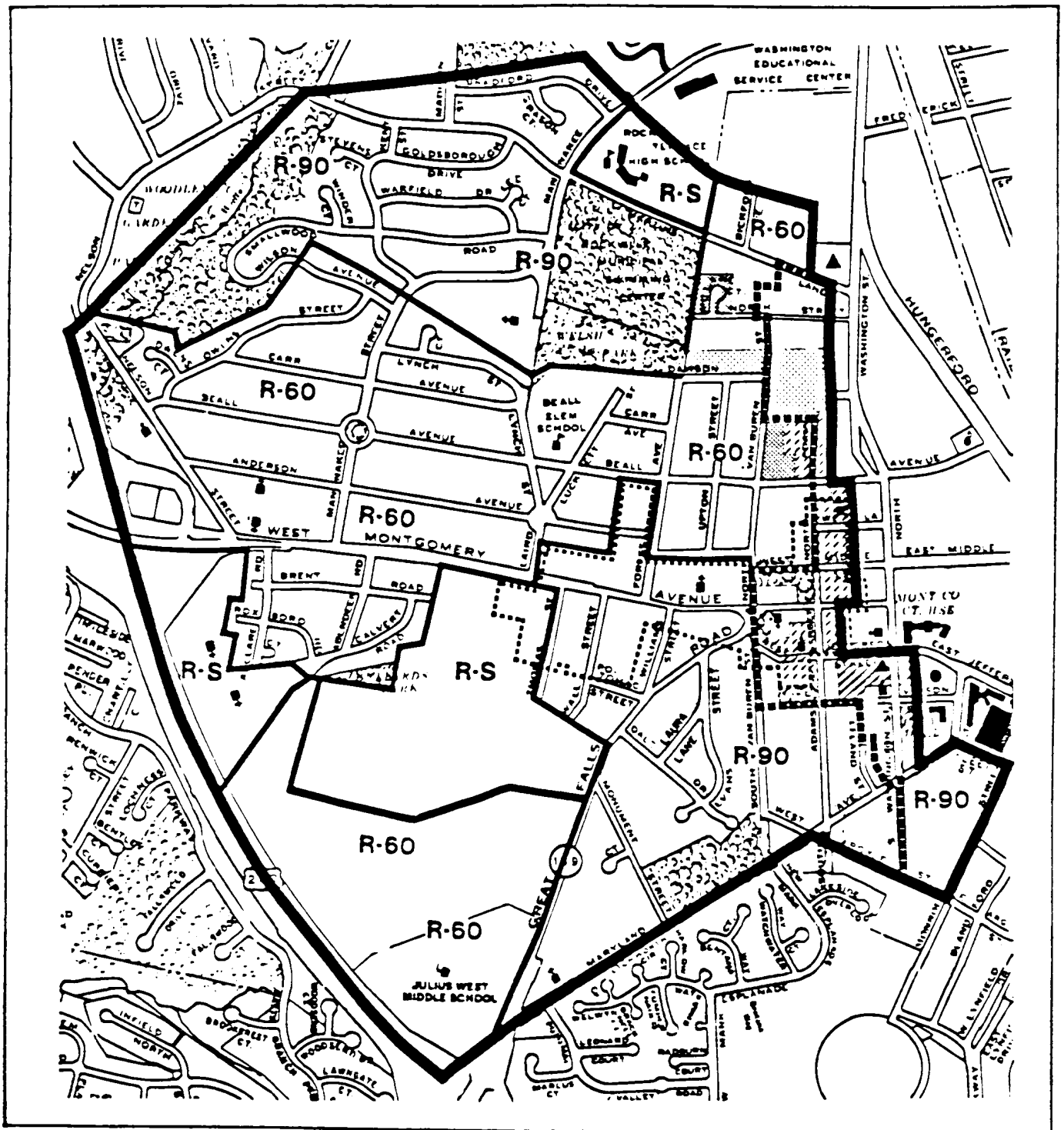
4. The houses at 100-110 South Adams Street are located at the edge of the Transitional District near Jefferson Street. The Town Center Plan recommended that these houses be included in the Transitional and Historical districts and beconverted to office use through the use of the O-2 zone as a means of stabilizing the abutting residential area. The subsequent creation of an open space buffer around the former Rockville Academy, however, has proved to be an effective buffer for these houses which are still in residential use almost ten years after the recommendation for their conversion to office use first appeared in the Town Center Plan. This plan, therefore, recommends:

**The houses at 100 - 110 S. Adams Street should not be included in the Transitional District and should remain as single family residential dwellings within their current zone.**



5. Dawson Ave.

5. There are several garden apartment buildings located on Dawson Avenue near Welsh Park. While these apartment buildings technically comply with the minimum housing codes of the City, their deteriorated condition does not attract newcomers who might be looking for a multi-family dwelling to the neighborhood. New families, for example, might be looking for such an alternative as a way of living in the neighborhood without the high cost of single-family rental or ownership. The neighborhood expressed itself strongly on the need to attract new families to stabilize the school population and secure the future of the neighborhood. Such housing might also be attractive to "empty nest" residents or singles who would appreciate the



## PLANNING AREA 4

Figure 6

# PROPOSED ZONING

## LEGEND:

D-2 TRANSITIONAL OFFICE

R-90 SINGLE FAMILY DETACHED RESIDENTIAL

R-90 SINGLE FAMILY DETACHED RESIDENTIAL

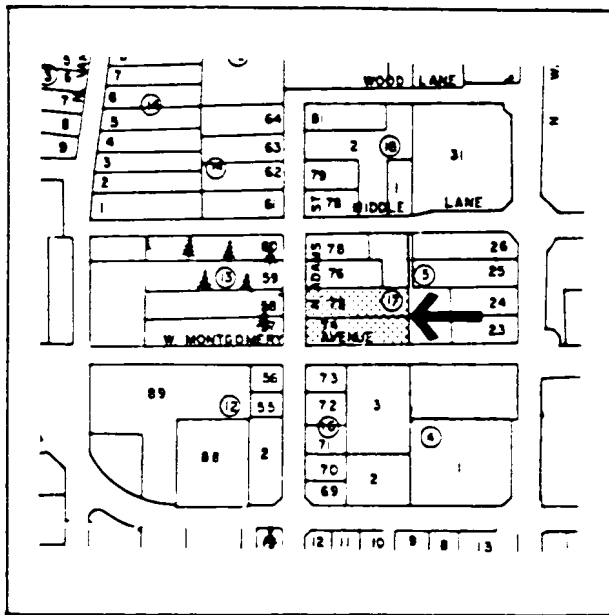
..... EXISTING M.D. BOUNDARY

D-1 OFFICE BLDG.

R-S SINGLE FAMILY DETACHED RESIDENTIAL

R-20 MULTI-FAMILY RESIDENTIAL

R-40 SINGLE FAMILY SEMI-DETACHED RESIDENTIAL



**6. 39 W. Montgomery Ave.**

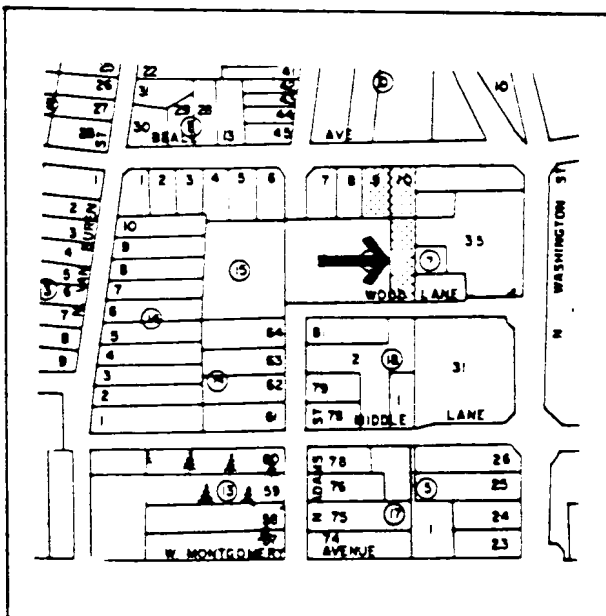
convenience of the adjacent Town Center and the neighborhoods. This plan, therefore, recommends that:

**The City should pursue a creative solution for the renovation of the apartments on Dawson Avenue, and if redevelopment is necessary the site should remain in its current zone.**

6. The Anderson property located at the corner of West Montgomery Avenue and North Adams Street includes a single-family house built in 1881 and a wide yard with frontage on West Montgomery Avenue. The property is surrounded by non-residential uses which suggests that continuing its use as a single-family home would not be reasonable.

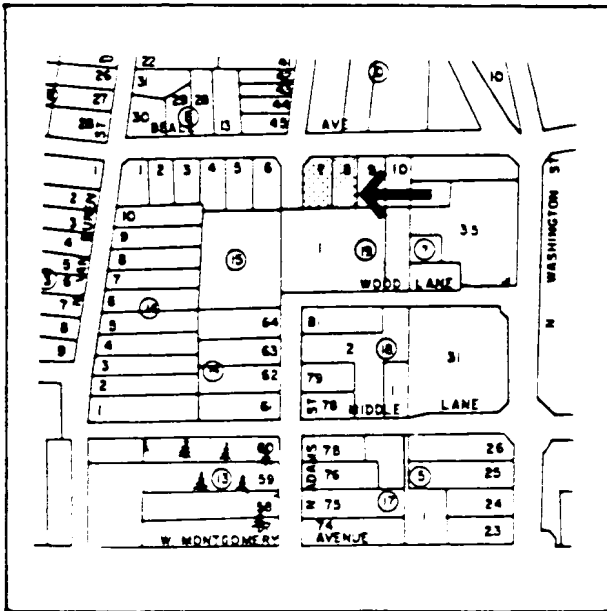
This property had been zoned for transitional office use in 1979 during the Town Center planning process, but was returned to residential zoning at the request of the owner. The current owner wishes to convert the property to transitional office use. The site is located within the Transitional and Historic Districts and could easily be used for similar purposes as other transitional office properties on North Adams Street and West Montgomery Avenue. The site's conversion to transitional office use would not have an adverse impact on any single family housing in the immediate neighborhood. This plan recommends, therefore, that:

**The site located at 39 West Montgomery Avenue, including the house and vacant lot, should be rezoned O-2 to permit transitional office use and development.**



**7. Wood Lane**

7. The Jerusalem Methodist Episcopal Church located on Wood Lane has a small vacant site behind it, extending



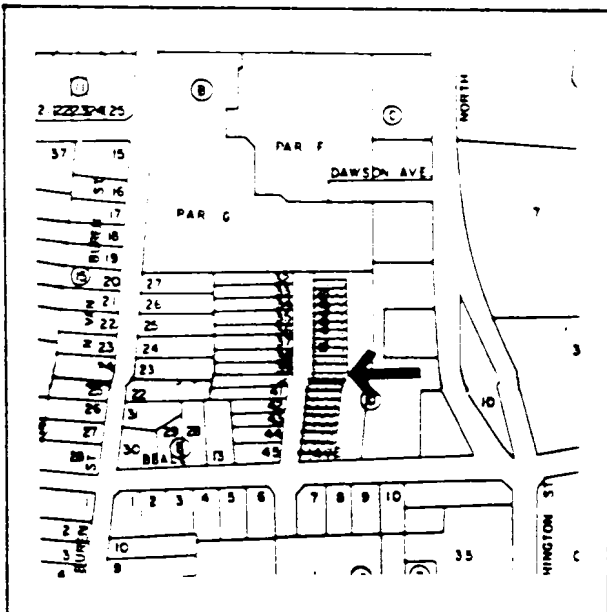
**8. 14 and 16 Beall Ave.**

north to Beall Avenue. The site is located in the Transitional District and is zoned O-2. The Church proposes building a senior housing development there, though this use is not currently permitted in the O-2 zone. Because of the need for many different types of housing within the West End and the strong recommendation of the neighborhood for a mix of housing types, this plan, therefore, recommends that:

**The Jerusalem Church site should be developed with elderly housing of a small to moderate scale and that the Zoning Ordinance be modified to permit elderly housing in this and other office zones.**

8. The two residential properties at 14 and 16 Beall Avenue are located within the Transitional District and are recommended for office zoning in the Town Center Plan. They are currently zoned R-60, single family residential. Office zoning on these properties would not be consistent with the objectives of this land use chapter. This plan, therefore, recommends that:

**14 and 16 Beall shall remain in the R-60 zone and be removed from the transitional district.**

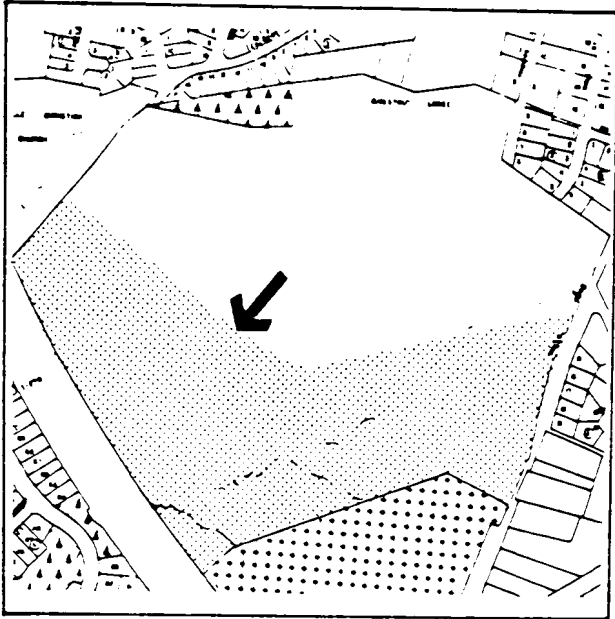


**9. 201-249 N. Adams St.**

9. The one-story attached units located at 201-249 North Adams have been zoned for transitional office use since 1979. Redevelopment to office space has not been accomplished because of site constraints, such as the problem of adequate parking and the fact that units are owned by several different parties. Their disrepair is unattractive to both current residents and potential office users. This plan recommends, therefore, that:

The units at 201-249 North Adams Street remain in the O-2 zone and the enhancement of the properties be encouraged by the City.

10. Chestnut Lodge is an internationally-known private psychiatric hospital located at 500 West Montgomery Avenue. The property encompasses a total of 113 acres along Great Falls Road from Potomac Street to Julius West Middle School, including frontage along Interstate 270.



10. Chestnut Lodge

The hospital has determined that the 50 acres located south of the existing hospital buildings are no longer needed for hospital uses. This tract of land is zoned R-S, one-half acre zoning. A number of land use alternatives were considered because of the site's unique location: adjacent to an interstate highway and interchange, yet in the midst of an established residential area. Given careful consideration of the existing Master Plan and zoning code recommendations and the needs of the neighborhood and the city, this plan recommends:

This site shall be developed with residential uses with specific consideration given to issues of noise generated by the Interstate and the traffic problems of the West End and other adjacent neighborhoods. In addition, it is recommended that the density of the residential development be compatible in total gross density with that of the surrounding neighborhood.

This parcel is one of the last large tracts in the city yet to be developed. Because of its size and some important site constraints (such as noise from I-270, wetlands, and possible traffic impacts) this site seems well suited for a Planned Residential Development (PRU). Indeed, the criteria included in the Zoning Ordinance concerning appropriate sites

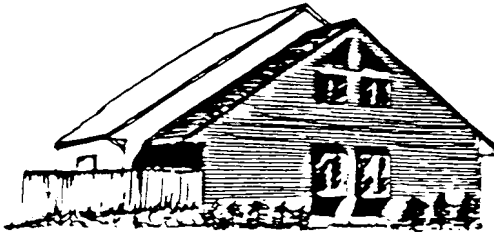
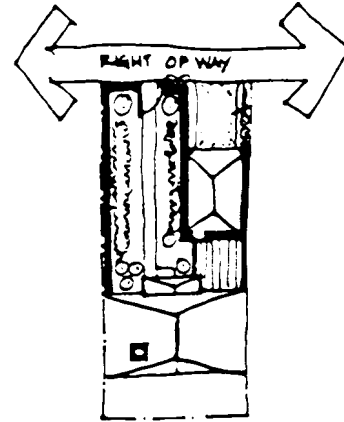
# BUILDING ORIENTATION AND DESIGN

Orientation and design are important factors in noise abatement. Below are some examples of ways to minimize the effect of the noise source.

## Example 1



Single family home with front elevation toward noise source. Noise abatement measures taken: projecting garage, recessed entrance, limited fenestration.



## Example 2

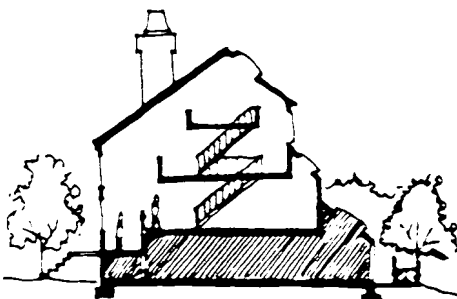
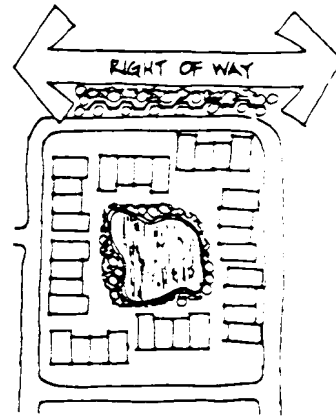
Side elevation near noise source. Window openings are limited and landscaping added to help absorb sound. Windows should be made of triple-pane glass for added sound insulation.

These same considerations should also be taken with other types of residential dwellings. Such as:

## Example 3



Townhouses in a block can help buffer other types of dwelling units. Walls, berms, and driveways can be used to shelter the buildings themselves.



## Example 4

Piggyback units can also be used. In this example the front has few window openings, but the back, away from the noise source, has many openings: both regular windows and skylights.

for special residential development, such as the PRU, speak directly to sites with special considerations such as this one. In particular, the procedure is intended to:

- (a) promote a creative approach to the development of residential land;
- (b) accomplish a more desirable environment than would be possible through the strict application of the requirements of the Zoning Ordinance;
- (c) promote the efficient use of land which will result in smaller networks of utilities and streets and resultant lower housing costs;
- (d) enhance the appearance and value of neighborhoods through the preservation of natural features and the provision of recreation areas and open space in addition to existing zoning, subdivision and plan requirements;
- (e) provide a cohesive neighborhood environment for new development compatible with existing neighborhood patterns.

The PRU process is flexible enough to accommodate the special development needs of a site near a major highway, yet keep it compatible with, and part of, the surrounding established residential community.

#### Development constraints

There are three significant development constraints on this site: the noise, the wetlands and traffic access.

A. Noise from I-270. The noise level on this site is estimated to be approximately 72 dBA<sup>2</sup> near the right of way line. Development of this site should include noise mitigation measures to insure that the noise level is within acceptable levels (65dBA) within the residential community. Some of these noise attenuation measures might include:

- Attention to building type, orientation and design
- Construction of noise barriers
  - wall
  - berm
  - landscaped screen
- Use of special noise rated building materials

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<sup>2</sup> Michael A. Staiano. Interstate I-270 Traffic Noise Exposure, West End Development, Rockville Maryland. September 1, 1988.



Building orientation and design are illustrated in Figure 7. Barriers and special building materials are discussed in greater detail in Appendix A.

B. Wetlands. A tributary of Watts Branch runs through the southern portion of this property near the border with Julius West Middle School. The need to preserve these wetlands, as required by Federal Law, and the need to provide a storm water management facility, as described previously, suggest that the addition of a water amenity would be appropriate. A water amenity, such as a pond or lake, would be aesthetically pleasing, provide some recreational opportunities and serve the important public functions described above.

C. Traffic Access. The main vehicular and pedestrian access to the development would be via a roadway from Great Falls Road. In addition, separate and well-marked pedestrian and bikeway routes should be provided which would link this development with West Montgomery Avenue, Julius West Middle School and Bullard's Park.

#### Residential types

A number of residential types are possible using the PRU special development procedure:

- single-family detached;
- attached units such as townhouses, duplexes and patio units; and,
- multi-family units such as garden apartments and piggy-back units.

The goals of this plan would best be served by a mixture of these units rather than reliance on any one particular type. This plan recommends that the housing facing Great Falls Road be compatible in scale to that of the existing single family dwellings already along the road. This can be accomplished by either building single family housing along the road or making more dense development, such as piggy-back units, resemble a single family dwelling unit.

#### Residential amenities

This plan recommends that the zoning on this site be compatible with the surrounding neighborhood. The surrounding neighborhood carries both R-60 and R-90 zoning. Given either one of these zones, or a combination, there would likely be between 197-296 dwelling units on the site. A population this large would require some usable open space and open space amenities that might include:

- ball fields, play fields;
- tennis courts;
- childrens play areas;
- club house/ gym;

- swimming pool;
- par course;
- passive park with landscaping;
- water-related amenities.

Some of these amenities might be incorporated into the site design to help buffer and screen individual residential units from the noise of I-270.

In summary, by using the flexible development standards of the PRU and careful site design, the Chestnut Lodge site can be developed with residential uses that would be desirable additions to the city's housing stock. Recreational amenities that may be provided in such a development would not only contribute to the quality of life on these 50 acres, but will improve the neighborhood at large.

### Proposed Zoning

As shown in Figures 3 and 4, the current zoning reflects the existing land use. To continue this important linkage, many of the land use recommendations previously described require some zoning changes. A sectional map amendment will be prepared following the adoption of this plan. Figure 6 shows the proposed zoning that will be included.

Historic District Expansion. Figure 6 also shows the present boundaries of the West Montgomery Avenue Historic District. In 1987, the City identified 183 historically and architecturally significant structures within the city boundaries. A number of these structures are located in Planning Area 4, but outside the existing boundaries of the historic district. Through a separate review process, the Historic District Commission will look into the feasibility of including all or some these houses in an expanded West Montgomery Avenue Historic District.

### IMPLEMENTATION

The foregoing land use recommendations seek to strengthen the residential character and improve the quality of life for the community. Several steps need to be taken to make these policies into City actions. Table 3, illustrated on the following page, is a summary list of the City actions required to implement this land use chapter.

**TABLE 3**  
**LAND USE RECOMMENDATIONS IMPLEMENTATION**

RECOMMENDATION	MAP AMENDMENT	CHANGE L.U. MAP	TEXT AMEND.	ENCOURAGE REDEVELOPMENT
1. Monument St./ Nelson St.				
2. Martins Lane				
3. 522 W. Montgomery				
4. 100-110 S. Adams		•		
5. Dawson Street				•
6. 39 W. Montgomery	•			
7. Jerusalem Sr.Housing			•	
8. 14 and 16 Beall	•			
9. 201-249 N. Adams				•
10. Chestnut Lodge	•	•		

## CHAPTER FOUR



## CIRCULATION

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## CIRCULATION

*Q-31 What do you like most about your neighborhood?*

- A. People who live here*
- B. My home*
- C. Proximity to shops, services*

*Q-32 What do you like least about your neighborhood?*

- A. Traffic Impact*
- B. Traffic Impact*
- C. Traffic Impact*

-- NPAG Survey Respondent

The road network in Planning Area 4 performs two functions: first, it provides access for area residents; second, it provides commuter access to the Town Center. These two functions are often at odds with one another. To provide through routes for commuters, the convenience of local trips is often compromised. Residents can spend several minutes on West Montgomery Avenue waiting to make a left hand turn into a side street or driveway. The free flow of through traffic is similarly inconvenienced by the stops and starts of local trips. This often leads to commuters taking an alternate path through local residential roads to reach their destination outside the neighborhood.

Separating these two functions -- keeping the local network local, while providing access for the Town Center -- is the theme of this chapter. The chapter is divided into two parts. The first will review the current road network and suggest ways to manage the two different kinds of vehicular traffic -- local and non-local -- that use this network. The second section will suggest ways to improve access to other means of transportation that are available to the neighborhood including walking, biking and public transportation.

Like the other chapters in the plan, this circulation chapter relies on the thematic goals as a basis for the policies and recommendations that will be discussed. Those goals are reprinted below with the objectives that guide this chapter.

1. **PRESERVE AND MAINTAIN THE INTEGRITY OF PLANNING AREA 4 AS A RESIDENTIAL COMMUNITY.**

Objective: Preserve local traffic network by limiting cut through traffic.

2. **IMPROVE THE QUALITY OF LIFE IN PLANNING AREA 4.**

Objective: Improve access to alternative forms of transportation.

TABLE 4  
  
**STREET CLASSIFICATION**

Limited Access

Interstate 270

Arterial

West Montgomery Avenue (Rt. 28)<sup>1</sup>  
Great Falls Road (Rt. 189)<sup>1</sup>  
Maryland Avenue<sup>2</sup>

Business District

S. Washington Street  
(Jefferson to Hungerford)  
N. Adams Street

Primary Residential

Beall Avenue  
Martins Lane  
Mannakee Street  
Nelson Street

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<sup>1</sup> W. Montgomery and Great Falls Road function as arterials but each have a narrower configuration to preserve the historic residential character of the area.

<sup>2</sup> Maryland Avenue is also narrower than the standard width required for an arterial. This configuration will be maintained to protect the residential character of the area.

## ROAD NETWORK

Planning Area 4 contains some of the city's major thoroughfares. These roads form what might be called the commuter network for Planning Area 4 and include: Great Falls Road (MD Route 189), West Montgomery Avenue and Jefferson Street (MD Route 28), Maryland Avenue and Interstate 270.

Nearly all of these roads are currently being improved and will provide better access to the Town Center. Interstate 270 is now being widened to carry 12 lanes of traffic and will have two interchanges that will link to the West End. An existing interchange at Route 28 will be reconfigured and the roadway of West Montgomery Avenue will be reconstructed to accommodate two through-lanes of traffic and a median turn lane. A new interchange will open in 1989 at the junction of Great Falls Road and Maryland Avenue near Julius West Middle School. Maryland Avenue, which forms the boundary between Planning Area 4 and Planning Area 3, is projected to carry most of the Town Center-bound traffic.

Commuter access to the Town Center is complicated by the fact that local traffic uses the very same network. Each of these major roadways (save for I-270) is lined with housing that has direct access to the road. These roads function, therefore, as both collectors of local traffic and arterial throughways for commuters.

The street network north of West Montgomery Avenue is much more residentially-oriented. Local traffic is less likely to be affected by commuter traffic bound for the Town Center, although students travelling to Montgomery College sometimes impede local access. There are east-west connections to the Town Center at Beall Avenue and Martins Lane. These function as primary residential streets which collect local traffic entering or exiting the neighborhood. Mannakee and Nelson streets function as the major north-south collectors. North Adams and North Washington streets are classified as a business district roads. The remaining roads in the planning area are classified as secondary residential streets which are meant to provide local access to homes. Table 1 illustrates the classification of streets throughout the planning area.

Just as there were concerns in the community about the possible encroachment of non-residential land uses that might accompany future development of the Town Center, there is great concern that Town Center traffic might overwhelm the local traffic network. Already commuters take shortcuts through the neighborhood streets to avoid delays on West Montgomery Avenue. These roads were never intended to accommodate this kind of traffic. Again, as with many of the land use recommendations cited earlier, many of the qualities that give the West End its individual charm create its greatest liabilities. Because the West End is so conveniently located -- close to shops and services as stated in the quote at the beginning of this chapter -- it is not possible to completely separate local and through traffic. Recognizing these constraints, however, this plan recommends that the negative effects of commuter traffic be reduced, as much as possible, in a manner consistent with the desires of the neighborhood.

TABLE 5

## PLANNED AND PROGRAMMED CIRCULATION IMPROVEMENTS

<u>Improvement</u>	<u>Completion Date</u>
<b>Maryland Avenue Traffic Control</b> (traffic light at intersection with Argyle and construction of southbound bypass lane at New Mark Esplanade)	1989
<b>North Street</b> (widening from North Van Buren Street to 400' east of North Washington Street with curb, gutter, sidewalk, storm drainage and landscaping)	1991
<b>West Montgomery Avenue</b> (reconstruction between Nelson and Adams streets with improved pedestrian walks and decorative and landscape improvements)	1991



## Recommendations

The roadway network in Planning Area 4 is used by both local and non-local traffic. Because this road network is within a residential community, however, maintenance of the local traffic network should take priority. This plan, therefore, recommends:

**The residential nature of the street system in Planning Area 4 should be preserved by minimizing cut-through traffic by using appropriate traffic management measures.**

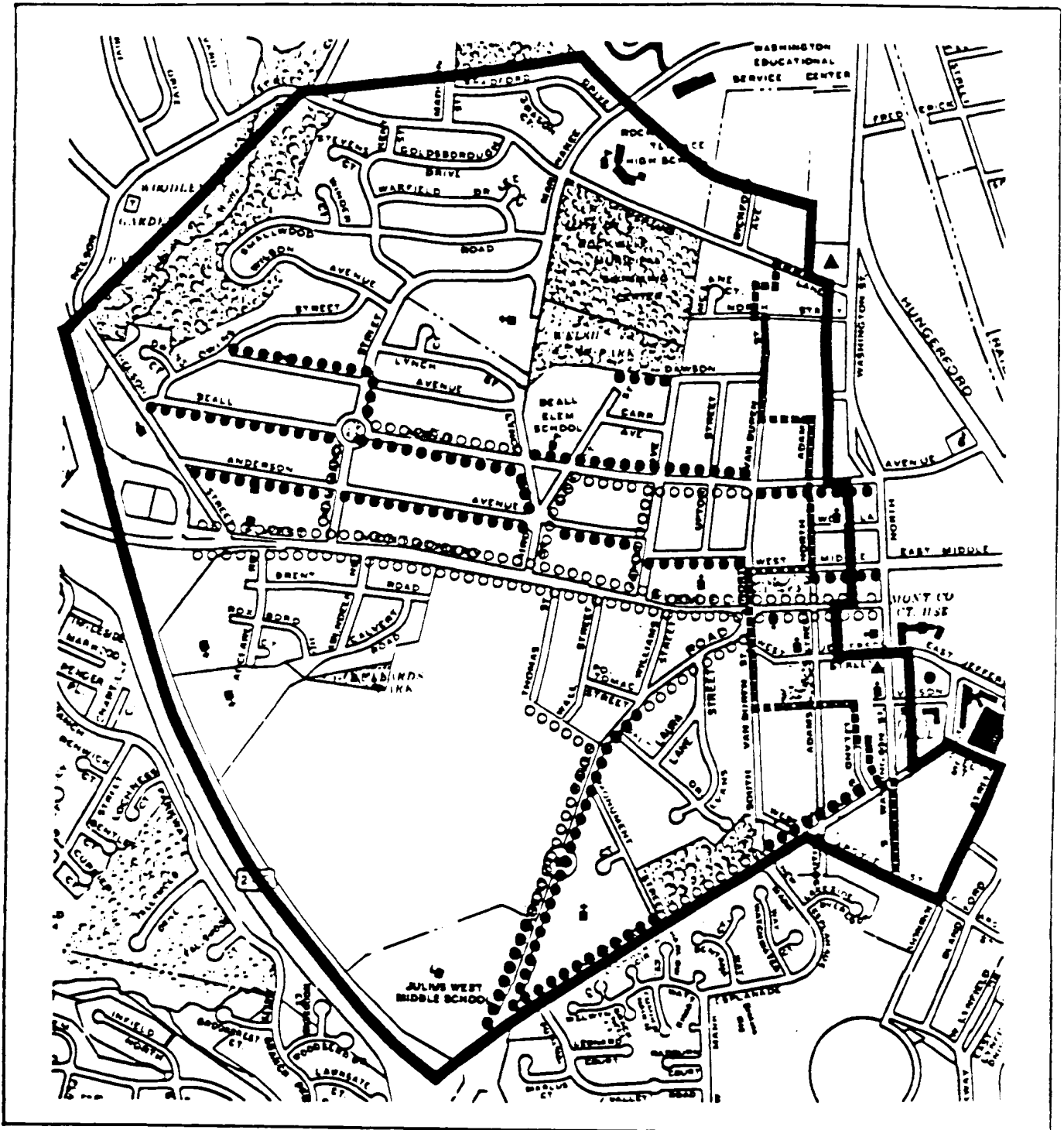
These measures will help separate local and non-local traffic by making it less convenient to use local streets for non-local traffic. The City can use several kinds of devices, including turn restrictions, traffic diverters, and designation of one-way streets. The placement of each of these devices will be carefully studied to ensure that it is appropriate and does not create adverse land use impacts. Upon recommendation and adoption of this neighborhood plan, a traffic management plan will be prepared by the Public Works and Planning Departments in conjunction with neighborhood residents. Roadways that are of particular concern include:

Great Falls Road  
West Montgomery Avenue  
Maryland Avenue  
Beall Avenue  
Anderson Avenue  
Carr Avenue  
Forest Avenue  
Harrison Street  
Lynch Street  
Lockett Street  
Middle Lane  
North Van Buren Street  
Monument Street  
Owens Street

For information about specific streets, please see Appendix C at the end of this document. The traffic management plan will separate, as much as possible, the two functions of the Planning Area 4 road network without sacrificing the commuter traffic which is important to the city's future growth or the local traffic which is vital for the preservation of the quality of life in the neighborhood.

## TRANSPORTATION ALTERNATIVES

At the same time that this plan seeks to restrict certain types of traffic to particular streets, it also seeks to open up transportation alternatives to a wider audience. The convenient location of the West End, near shopping and services, makes these alternatives valuable resources for the neighborhood.



**PLANNING AREA 4** Figure 8

**PEDESTRIAN  
CIRCULATION**

**LEGEND:**

- NEW SIDEWALK
- SIDEWALK IMPROVEMENT

## Pedestrian Ways

Many areas of Planning Area 4, particularly in the more historic sections, do not have sidewalks. Roadways were planned before sidewalks, curbs, gutters and street trees became standard requirements for a city street. Pedestrian movement within the neighborhood is hindered by the lack of adequate sidewalks. Without a separate, defined area for the pedestrian, the rights of the vehicle and the pedestrian become confused, with the pedestrian invariably feeling unprotected from other forms of traffic. This plan, therefore, recommends:

**The sidewalk system in Planning Area 4 should be improved by providing new sidewalks and improving those that exist as is made feasible by existing conditions.**

The goal of the neighborhood is to have sidewalks on at least one side of every local street. On those streets that link the neighborhood to the Town Center or to neighborhood schools, sidewalks should be located on both sides. No resident, whether young or old, able-bodied or handicapped, should have to cross a heavily-travelled street such as Great Falls Road to get to a sidewalk. This is both unsafe and inefficient if a pedestrian system is to become an important feature in the circulation network.

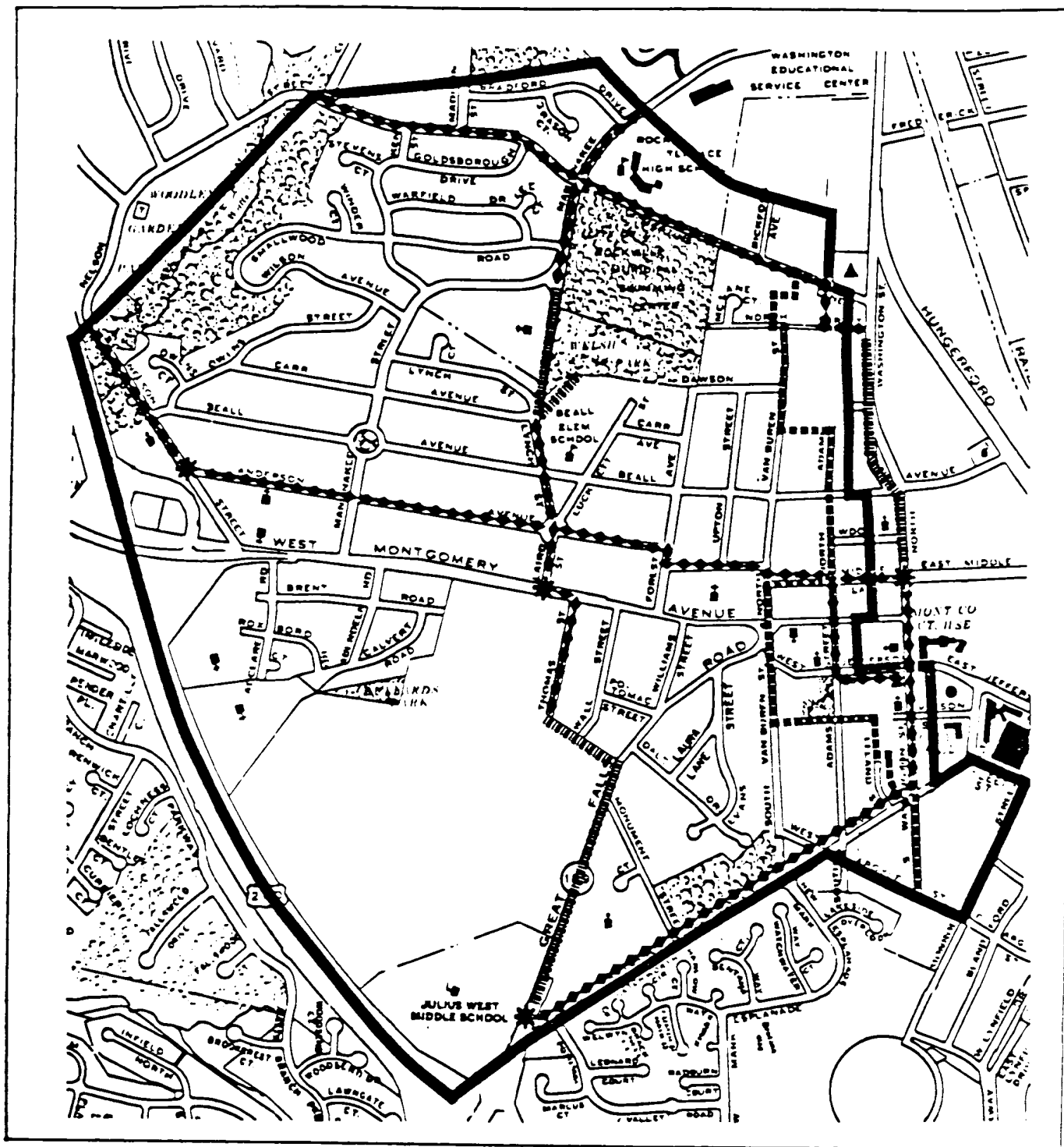
Figure 8 shows the proposed pedestrian network and includes both areas where existing sidewalk requires improvement and areas where new sidewalk should be placed.

## Bike Routes

Bicycle transportation has come into its own in recent years. No longer viewed as just a toy, the bicycle can provide a genuine alternative to vehicular transportation and surpasses the automobile in terms of efficiency in local travel. The NPAG Survey showed that more Area 4 residents bike to work daily than use the MARC Rail, Metro bus or Ride-on Bus. This already significant number of users could easily be increased if the needs of the cyclist were incorporated into the Area's transportation plan.

Why should bicycle use be encouraged? Bicycles are extremely efficient for local trips and create no pollution. For users of other forms of transportation, an increase in bicycle usage for local trips reduces competition in streets and parking. Bicycles cause significantly less wear and tear on the city's infrastructure and enhance the quality of life for area residents.

This plan recommends a well-marked bike route to connect area schools, shopping and services. The traffic management plan described above will help to lessen traffic on certain local streets that could then safely accommodate both local vehicular and bicycle traffic. Figure 9 shows the proposed bikeway route, which is based upon the City's Bikeway plan proposed in 1981. Most bikeways would use a shared right-of-way, though a private bikeway planned for Great Falls Road, would be well separated from the vehicular right-of-way and provide safer access to Julius West Middle School than is



## PLANNING AREA 4

Figure 9

## BIKEWAYS

### LEGEND:

- SEPARATE RIGHT OF WAY FOR BIKES
- SHARED RIGHT OF WAY FOR BIKES
- AREAS OF POTENTIAL CONFUSION

currently possible. In implementing the bike route, careful attention should be paid to reducing potential conflicts when these routes cross major streets.

### Public Transportation

The two alternatives previously discussed are meant to replace many local vehicle trips. Public transportation, including MARC Rail, METROrail, Metrobuses and County Ride-On buses may help replace some longer trips. All of these alternatives work well together because providing safer sidewalks and designated bikeways will improve access to rail and bus routes.

The results of the neighborhood survey show that of the residents that currently use the METRO system, 54 percent drive to the station. Additional Ride-On routes along some primary residential streets might encourage higher usage of the METRO and MARC Rail. New Ride-On routes or some other jitney-type service could also help those who already ride METRO or MARC Rail, by providing a convenient alternative to the automobile. This would help reduce some rush hour traffic in the neighborhood. This plan recommends, therefore:

**The City should explore the possibility of improving Ride-On or adding some other type of service to improve neighborhood access to public transit.**

### IMPLEMENTATION

The foregoing recommendations seek to separate local and non-local traffic to preserve the residential character of the neighborhood. In addition, improved pedestrian, bicycle and public transit opportunities will take some vehicles off the road, improving the quality of life for residents. As indicated, the problems addressed by this element are complex and require considerable work before they become part of the community's daily routine. Below is a list of the City actions required to implement this circulation chapter.

<u>Proposal</u>	<u>Prepared by</u>
1. Traffic Management Plan	Public Works, Planning
2. Pedestrian Network Improvement	Public Works, Planning
3. Bike Route Implementation	Public Works, Recreation
4. Public Transit Study	Planning

In addition, with its sidewalk and bikeway plans this plan recommends a significant amount of infrastructure improvement. This plan, therefore, also recommends:

**Sidewalk, curb, and gutter improvements should be publicly funded in whole or in**

part, if after a public hearing public funding is determined to be appropriate. Special factors such as the relationship of the improvement to Julius West Middle School and Beall Elementary School as well as other public safety considerations should be given special consideration in this process.

# APPENDICES



## **APPENDIX A**

### **NOISE AND NEW HOUSING**



## NOISE AND NEW HOUSING: An Introduction

This report illustrates some of the possible solutions to the effects of noise in residential areas. It is divided into two sections that answer the following questions:

1. What is Noise?
2. What are the Options to Reduce Noise?

This is not a technical report. Instead, this report attempts to explain noise, its measurement and abatement for the layman. In order to keep the explanations simple, therefore, the information presented is rather general. For more detailed information please refer to the bibliography at the end of this appendix.

### What is Noise?

Noise is unwanted sound. Sound is a series of vibrations that travel through air, water or solids. The unit of measure for sound is the **decibel (dB)** which measures the actual pressure of the vibration. Because sound travels in waves of vibration it can pass through many materials. The reason windows rattle and walls hum in some homes near busy streets is because the building materials pick up the vibrations and carry them into the home. Therefore, the greater the sound pressure, or the higher the decibel, the more likely that noise will have an effect on residential property. Frequency (hZ) is the measure of the speed of the sound vibrations. Higher frequency sound is generally easier to reduce than lower frequency sound.

Sound is measured in a variety of ways. The most often used indices are cumulative measures such as the "equivalent sound level" noted as  $L_{eq}$  (time period), which gives the average sound level over a specified period of time. Other indices calculate the sound pressure by measuring the amount of time the noise exceeds a particular level. Still others can create a likely 24-hour model of the noise based on an hour or two of measured data.<sup>1</sup> In comparing different sound levels, it is essential that the same indices be used. Along with the kind of index used, one should also study the assumptions used by the analyst and decide whether these assumptions are valid. Noise measurement is not an exact science -- different indices of measurement or different assumptions can create a range of different answers.

The maximum decibel level generally accepted for residential property is 65 dbA.<sup>2</sup> Many communities have noise levels higher than this recommended level. Housing may have no special building materials or barriers to reduce the sound. Surprisingly, this

seems to have little effect on housing sales. The difference between the market price of a house adjacent to an interstate highway and an identical house located at the interior of a neighborhood is small if at all measurable.<sup>3</sup> The disadvantages of a noisy neighborhood appear to be offset by the convenience of the adjacent Interstate highway.<sup>4</sup>

### Options to Reduce Noise

There are a variety of options for reducing noise in residential areas, all of which fall under the following three categories:

- (1) Reduce or eliminate the noise level at the source;
- (2) Build barriers to shield sites from noise; and,
- (3) Insulate the structure of the dwelling.<sup>5</sup>

Option 1 is not likely possible near an existing major highway. If the interstate were in the planning stages the road could be located to have as little effect as possible on the nearby residences. Different kinds of road surfaces and the locations of turns and inclines could also be designed to minimize the amount of traffic noise that would reach a nearby residential area. With an existing highway, however, there is very little that can be done to reduce the noise at the source.

Providing distance from the noise source is a passive approach to reducing the noise from a major highway. Noise is a localized phenomenon and loses much of its energy over distance. According to one expert, "...measured noise levels decline to background levels within roughly 1,000 feet of the highway."<sup>6</sup>

The kind of surface the sound passes over can also effect how far the sound will travel. Paved roads can actually amplify sound waves.<sup>7</sup> Grassy areas, landscaping and just plain dirt can help absorb sound and can further enhance any other noise reducing measures that might be taken. As with eliminating the noise source, however, providing enough distance to reduce the amount of noise within acceptable levels can prove impractical. In these cases, other more aggressive options should be explored.

Option 2 presents such possibilities. The most common barrier treatments used along highways are walls, earth berms and groves of trees, or any combination of the three. To block sound effectively, the barrier must block the line of site between the dwelling unit and the noise source.

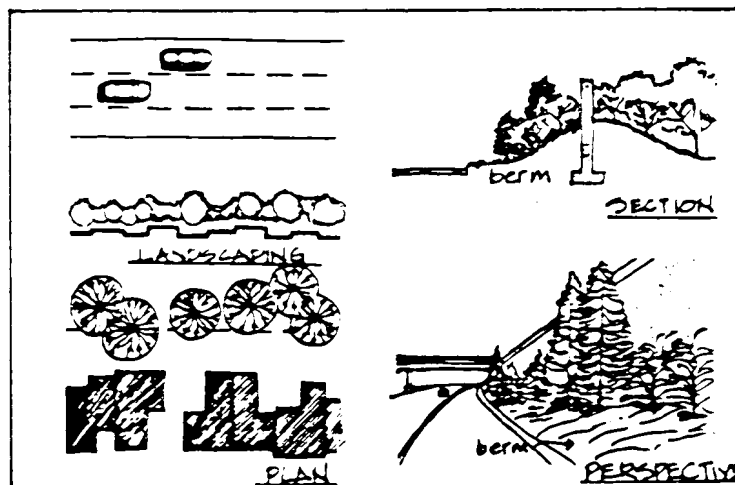
Walls are often used to block sound from the highway. Freestanding walls may be used, which can easily be constructed within a limited right-of-way.<sup>8</sup> "Blind walls" that are a part of the structure of the dwelling unit can also be used.<sup>9</sup>

Walls are most effective at blocking higher frequency sound than those at lower frequencies. Low frequency sound will tend to diffract toward the edges of walls and over the top, reducing the wall's effectiveness as a noise barrier.<sup>10</sup>

Walls have another disadvantage, however, that has little to do with their noise blocking capabilities: they tend to be unattractive. In a residential area this can be a real concern. For example, how attractive would a development be to new buyers if the houses are located in shadow because of the height of the barrier necessary to accommodate difficult topography? Equally important, how attractive would a traditional suburban house be with one wall completely devoid of window or door openings? These concerns are just some of the reasons why walls are often found in combination with other kinds of barriers to help soften their appearance. For example, shrubs or trees may be planted next to the wall or the wall itself may also be fitted with an irrigation system so that plants may be installed in niches along the face.<sup>11</sup>

Berms are also used in combination with walls. Earth berms are mounds of earth which run parallel to the roadway and which are high enough to block the line of sight between the noise source and the noise sensitive area.<sup>12</sup> Earth berms tend to appear more natural than other forms of noise abatement, particularly when combined with landscape plantings. Used in combination with a wall, earth berms can reduce the visual impact of a high wall. Berms require more space than the standard wall. Since they are generally constructed with 2 : 1 slopes, a ten-foot high berm would require a minimum of 40 feet of horizontal distance.<sup>13</sup>

Landscape plantings are another means of blocking unwanted sound. U.S. Forest Service tests have shown that a wide, tall and dense belt of trees can reduce high speed truck noise by as much as 10dB.<sup>14</sup> These tests have shown that to reduce traffic noise in a rural area, these stands of trees must be at least 65-100 feet wide. In a more urban area, however, stands of densely planted trees need only be 20 - 50 feet wide.<sup>15</sup> The most effective plant material is evergreen, since it offers year-round protection. Cedar, cypress, spruce, pine and hemlock are examples of tall evergreens. Juniper, yew,

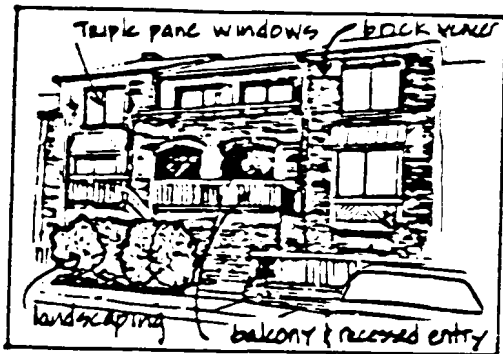


arborvitae, eunonymous, privet and pyracantha are examples of medium to short varieties.<sup>16</sup>

More often than not these three kinds of barriers are used in combination. Landscaping will actually improve the performance of a berm.<sup>17</sup> A wall/berm combination

can act as a balanced reflecting/absorbing system. The wall will reflect much of the sound and the berm will help absorb what is left over.

Option 3 - insulating the dwelling structure itself - is best used in combination with some sort of barrier system. Without a barrier system, the interior of the house will be quiet, but the private or public open space may be uncomfortably noisy.



There are many materials that can be used to prevent noise from entering the home. We have already discussed the use of walls as a noise barrier. Several different kinds of products can improve the ability of a wall to block noise. For example, masonry blocks, which are often used for foundation work, can actually be tuned to a particular frequency depending upon how the openings are cut.<sup>18</sup> If those openings are filled with foam or some other type of absorbent material the wall can be even more effective at reducing noise.

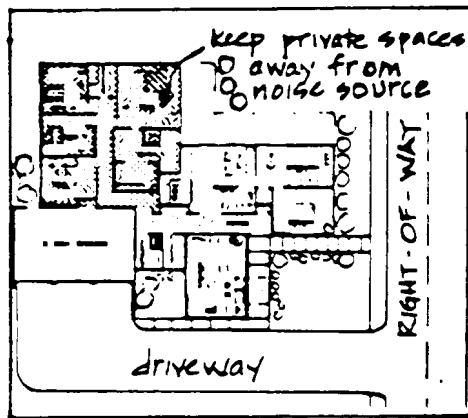
It would be a most unusual house, however, that featured only solid wall. Doors and windows must be included, as well. These wall openings are the weak points in soundproofing a house. Special materials have also been developed, however, to help reduce the potential for leaks. Triple-pane windows block much of the noise, not only because of the addition of two panes of glass, but because each of these panes is carried on a rubber membrane that isolates it from the others. This prevents the sound vibrations from the outside being transferred to the inside.<sup>19</sup> Glass block is another alternative. It is as sturdy as a wall, yet lets light into the interior.<sup>20</sup> If the wall of a house acts as the barrier (as opposed to a berm or freestanding wall), glass block could be used on the side of the house that is most noise sensitive.

In the same way, doors can be made of special materials that block noise. When surrounded by special gaskets, they provide an effective seal against unwanted sound.<sup>21</sup>

Many other materials, from fiberglass, to mastics, quilted wall insulation, and prefab panels, can help reduce the impact of sound within the home.<sup>22</sup> Most of these products have been tested to measure their "transmission loss," that is, how many decibels the material will block or absorb. This is done by subtracting the number of decibels measured on one side of the material from those on the other side.<sup>23</sup>

There are several different kinds of ratings. The one most often seen is STC, or Sound Transmission Class. The designation is usually followed by a number, such as "STC 50." The number indicates the percentage of the sound that will be reduced. Therefore, "STC 50" indicates that a particular material would block 50 percent of the sound.<sup>24</sup> Another measure is NRC, or noise reduction coefficient. This measures the ability of a material to absorb sound.<sup>25</sup> Both NRC and STC ratings can vary according

to the frequency of the sound. The STC ratings are generally lower at lower frequencies, while the NRC ratings are higher.



Even though they may receive very high ratings in the laboratory, noise-reducing materials are most effective when used with a good site layout and building plan. Noise should be a factor in the design of the units as well as in the materials selected for construction. Rooms that require quiet, for example, should not be placed on the noise side of the house. Bedrooms, studies and other private spaces should be as far away as possible from the noise source. Hallways, laundry rooms, stairways or kitchens can absorb sound without imposing on the privacy of the residents. Garages can be placed in the front or rear to provide a calm and quiet garden, patio or deck.

None of the building materials mentioned above will completely eliminate the noise. Used in combination with sensitive site planning, building design and barriers, housing near an interstate can be a positive addition to the city's housing stock.

### Conclusion

This report provides a brief introduction to the concept of noise, its measurement and abatement. The information presented here clearly illustrates that there are options for reducing the noise levels at dwelling units near an interstate highway. More pointedly, this report illustrates that noise need not be the driving issue in land use considerations. Appropriate orientation, optimal locations, sensitive design and inclusion of some of the noise abatement options presented here will improve the quality of life for residents living near the interstate. In the same way, the inclusion of new housing, made possible through noise abatement measures, improves the City's housing stock and the City's ability to provide for its citizens well into the future.

## ENDNOTES

1. For more information on different noise descriptors, see Michael Rettinger, Handbook of Architectural Acoustics and Noise Control: a manual for architects and engineers, (Blue Ridge Summit, PA: TAB Professional and Reference Books, 1988), pp. 22-50.
2. "A" stands for "A-weighted measure" which focuses the measurement on the frequencies audible to the human ear.
3. Max J. Derbes, Jr. CRE and George H. Cramer, III, "Noise and Property Value," Real Estate Issues, Vol. 4, No. 2, Winter 1979, p. 54.
4. In fact, it appears that the difference in housing prices is greater when comparing a house facing an arterial road with an identical one on a secondary street than when comparing a house adjacent to an Interstate and an identical one on the interior of the neighborhood. Ibid.
5. Jim Dickinson, New Housing and Road Traffic Noise: a design guide for architects, (London: Her Majesty's Stationery Office, 1972), p. 9.
6. Jon P. Nelson, "Highway Noise and Property Values: A Survey of Recent Evidence," Journal of Transportation Economics, Vol. 16, 1982, p. 130.
7. David F. Van Haverbeke and David J. Cook, "Green Mufflers," American Forests, November 1972, p. 30.
8. Rockville, Maryland, Recommendations for I-270 Noise Abatement, (1986) p. 2.
9. Dickinson, p. 13
10. U. S. Department of Health, Education and Welfare, A Compendium of Materials for Noise Control, May 1980, p. 82
11. Michael Rettinger, Handbook for Architectural Acoustics and Noise Control: A manual for architects and engineers, (Blue Ridge Summit, PA: TAB Professional and Reference Books, 1988) p. 61.
12. Rockville, Maryland, p. 1.
13. Rockville, Maryland, p. 2.
14. Van Haverbeke, p. 30.
15. Ibid.
16. Ibid.
17. Ibid., p. 31

18. A compendium..., p. 158.
19. Ibid., p. 289
20. Rettinger, p. 99.
21. Dickinson, p. 15
22. A compendium..., pp. 158 - 289.
23. Rettinger, p. 88.
24. Ken Polchak, State Highway Administration, Interview, October 7, 1988. Noise is measured in logarithms, so an STC rating of 50 does not mean that a site with 72 decibels would be reduced to 36 decibels by using these materials. The actual reduction would equal about 10 dB. Even so, reducing the noise to an average of 62dBA is well within the acceptable range.
25. A compendium..., p. 143

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4. Rettinger, Michael. Handbook of Architectural Acoustics and Noise Control: A Manual for Architects and Engineers. Blue Ridge Summit, PA: TAB Professional and Reference Books, 1988.
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6. U. S. Department of Health Education and Welfare. A Compendium of Materials for Noise Control. May 1980.
7. U. S. Department of Transportation. Highway Noise: A Guide to Visual Quality in Noise Barrier Design. December 1976.
8. Van Haverbeke, David F. and Cook, David J. "Green Mufflers." American Forests. November 1972, pp. 28-31.



## **APPENDIX B**

### **GLOSSARY OF TERMS**

## GLOSSARY OF TERMS USED IN THIS PLAN

**CIP:** The Capital Improvements Program is a multi-year scheduling of public physical improvements. The scheduling is based on studies of fiscal resources available and the choice of specific improvements to be constructed for a period of five years into the future.

**Decibel:** A decibel (dB) is a unit of the intensity of sound. Sound is registered as small oscillations in atmospheric pressure. The decibel is a measure of this sound pressure. When measuring the affect of noise on human populations an "A-weighted" sound level is often used to describe the overall measure of sound occurring at a particular moment. It is given in units of A-weighted decibels or dBA.<sup>2</sup>

**dBA:** See decibel

**Density:** The number of families, individuals, dwelling units or housing structures per unit (usually acres) of land.

**Duplex:** Two attached dwelling units. Duplex units are generally built in the same form as single-family houses except that they share one wall which extends from the cellar to the roof. They are separated from other buildings or structures by space on all other sides.

**Flood Plain:** For a given flood event, that area of land adjoining a continuous water course which has been covered temporarily by water.

**Garden Apartment:** A multi-family dwelling usually not more than three stories in height with generous amounts of common open space and landscaping.

**Goal:** A goal is an abstract, long-range policy guide. If you think of a plan as a road map, the goal is ultimate destination. (See Objective, Supporting Policy and Strategy)

**Historic District:** Article 66B, Section 8.02, of the Annotated Code of Maryland extends authority to each County and Municipality to "establish, change, lay out and define Districts which are deemed to be of historic and architectural value." There are four historic districts within Rockville: West Montgomery Avenue, Courthouse Square and South Washington Street, Baltimore and Ohio Railroad Station Historic District and the Dawson Farm. The Historic District Commission reviews requests to modify or restore properties within the historic district. Through these efforts, properties have been sympathetically altered or restored, maintaining their integrity and value as historic resources.

**Home Occupation:** An occupation conducted entirely within a dwelling unit only by a member or members of the immediate family residing there, not including a

boardinghouse, and which complies with specific performance standards of the Zoning Ordinance in terms of size and permitted uses.

**Master Plan:** A compendium of general policies regarding the long-term development of the city. This document is often in the form of a map and accompanying text and is adopted by the local legislative body.

**Neighborhood Plan:** This is a Master Plan developed for a sector of the City. It attempts to identify issues that confront an area on a day-to-day basis. It affords the opportunity for the affected community to focus attention on the forces that exert pressure for change and to formulate a response for consideration by the governing body.

**Noise:** Unwanted sound.

**Noise Abatement:** Measures taken to reduce the effects of noise. Such measures might include barriers, special building materials and design considerations.

**Objective:** An objective provides the direction to achieve a goal and provides criteria by which progress towards the goal can be considered. If you think of the plan as a road map, an objective is a major landmark. (See Goal, Supporting Policy and Strategy)

**Patio Home:** A patio home is usually a zero-lot line house (that is, one side of the house sits on or very near one side lot line), and is usually surrounded on the other three sides by private open space. The garage is generally placed at the front of the site to help provide privacy for the interior courtyard.

**Piggy-back Unit:** A piggy-back unit is literally one unit built on top of another. These units are often built to look like townhouses so that they present a unified architectural appearance. Piggy-back units generally do not include rear yards so units are often placed back to back. Front balconies and common open space provide access to the outdoors.

**Planning:** Policy guidance which promotes and facilitates the orderly development and redevelopment of a city.

**Special Exception:** A grant of a specific use that would not be appropriate generally or without restriction and is based on a finding that certain conditions governing special exceptions exist and that the use conforms to the Plan and is compatible with the existing neighborhood.

**Standard Traffic Methodology:** A set a guidelines for the development and review of traffic impact studies required for development applications. A traffic impact study is generally required when the proposed use will generate more than 100 vehicle trips during a given hour.

**Strategy:** A strategy is a short-term specific task needed to implement a supporting policy. If you think of the plan as a road map, strategies are the directions you follow to find the major roadway (supporting policy) to reach an important landmark (objective) on your way to your ultimate destination (goal). (See Goal, Objective and Supporting Policy)

**Street Classifications:**

<u>Street Class</u>	<u>Rockville Class</u>	<u>Vehicles Per Day</u>
Freeway	Limited Access	50,000 - 200,000
Major Arterial	Major, some arterials	20,000 - 60,000
Minor Arterial	Some arterials, primary industrials, business	10,000 - 25,000
Major Collector	Some primary residential primary industrial business district	4,000 - 12,000
Minor Collector	Most primary residential, some primary and secondary industrial, business dist.	1,500 - 5,000
Access	Secondary residential. some secondary industrial	300 - 2,000
Minor access	Secondary residential	up to 500

**Supporting Policy:** A supporting policy defines the means and method of achieving the objectives. If you think of planning as a road map, a supporting policy is the road leading to a landmark or milestone (objective). (See Goal, Objective and Strategy)

**Townhouse:** One of a group of two or more attached dwelling units divided from each other by party walls and each having separate front and rear or front and side entrances from the outside.<sup>3</sup>

**Transitional District:** An area that provides a transition between commercial and office uses and nearby residential uses to stabilize adjacent residential neighborhoods and promote preservation of existing residential structures through adaptive reuse.

**Use Permit:** A certification issued by the Planning Commission or the Director of Planning that a use or development complies with the Zoning Ordinance and other applicable land use or development regulations and policies. A valid use permit is required for issuance of a building permit in certain zones.

**Variance:** A modification only of density, bulk or area requirements in the Zoning Ordinance where such modification will not be contrary to the public interest and where, owing to conditions peculiar to the property, and not the result of any action taken by the applicant, a literal enforcement of the Ordinance would result in unnecessary hardship.

**Vernacular House:** A vernacular house or building is one built without the benefit of an architect. Eighteenth and nineteenth century houses were often built this way. The

carpenter would follow a rough sketch and would often use materials from the site, such as timber or field stone, to construct the building.

**Wetlands:** Wetlands are areas that are periodically or permanently inundated by surface or ground water and support vegetation adapted for life in saturated soil. A significant natural resource, wetlands serve important functions relating to fish and wildlife; food chain production; habitat; nesting; spawning; rearing and resting sites for aquatic and land species; protection of other areas from wave action or erosion; storage areas for storm and flood waters; natural recharge areas where ground and surface water are interconnected; and natural water filtration and purification functions.<sup>4</sup>

**Zoning:** A police power enacted by local governments according to state legislation. Zoning regulations establish, in advance of application for development, groups of permitted uses that vary from district to district. They also control the placement, height, bulk and coverage of structures within each of the districts into which the jurisdiction is divided by the zoning map, which is a part of the Zoning Ordinance.

#### Glossary Endnotes

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3. Zoning Ordinance of the Maryland-Washington Regional District in Montgomery County, October 1986, p. 35
4. United States Army Corps of Engineers. Regulatory Program: Applicant Information. May 1985, p. 5.

## **APPENDIX C**

### **TRAFFIC PROBLEMS IN THE WEST END**

(Excerpts from the Neighborhood Planning Advisory Group Final Report)

## TRAFFIC PROBLEMS IN THE WEST END

*(The following is a list of issues reprinted from the NPAG Final Report, dated June 1987, pages 104 - 126. The issues are listed by street for the reader's convenience.)*

### General Concerns

1. Cut-through traffic is a significant problem on several residential streets in the Planning Area. Motor vehicles use residential streets to avoid congestion on the arterial roads and to shorten the distance to their ultimate destination. The problem is particularly acute for those streets which offer an alternative route to and from the Town Center and Montgomery College.
2. The neighborhood bears a heavy burden of truck traffic due to its location on several major transportation routes. Two state highways, West Montgomery Ave. and Great Falls Road, pass through the neighborhood, and it is bounded on the west by an interstate highway which discharges traffic onto local streets. The volume of truck traffic is inconsistent with the residential character of the neighborhood and threatens the health and safety of its residents.
3. Many roadways in the Planning Area are substandard, lacking uniform width, curbs, gutters and storm drainage.
4. Sidewalks immediately adjacent to fast moving traffic are inherently dangerous to pedestrian travel.

### 5. Great Falls Road

- The proposed office and residential development of the Chestnut Lodge Property will result in a significant increase in traffic on Great Falls Road, which will be the sole entry to and egress from the development. This will be in addition to the traffic generated by the completion of the Great Falls Road/I-270 Interchange. With the projected development of the Chestnut Lodge property, there is concern by residents over the impact of increased traffic.
- There has been an increase of heavy truck and bus traffic during the past number of years. Many of these vehicles travel at greater than reasonable speeds, causing considerable vibration and shaking of the residences along Great Falls Road.
- Pedestrian passage is hazardous at best.

### 6. Maryland Avenue

- The City currently prohibits heavy truck traffic from travelling on Maryland Avenue. When the Great Falls Road Interchange is opened, most vehicular traffic headed for the Town Center will use Maryland Avenue; however, all heavy trucks will be compelled to negotiate a sharp left turn to use Great Falls Road to enter the Town

Center, due to the current City policy. Therefore a disproportionate amount of the increased traffic, also contributing to a disproportionate amount of noise, pollution, dust, debris and vibration not generated by smaller vehicles.

- The opening of the I-270 interchange will result in a significant increase in traffic on Maryland Avenue.
- The sidewalk has missing segments which oblige pedestrians to cross the high speed, heavily-travelled Maryland Avenue to regain the sidewalk on the other side.

#### 7. West Montgomery Avenue

- The irregular road surface is a traffic hazard which causes drivers to lose control of or damage their vehicles during inclement weather. The change in the width of West Montgomery Ave. east of Nelson Street from three to two lanes, and unclear lane markings result in motorists sometimes dangerously jockeying for position.
- Left turns are difficult from most side streets on to West Montgomery Avenue.
- Utility poles on West Montgomery Avenue near Laird Street are directly at the road side, creating a potentially dangerous situation.
- Access to and egress from non-residential use in the area of the intersection of West Montgomery Avenue and Nelson Street would further degrade traffic movement and create a traffic hazard.
- Traffic detoured through the Planning Area residential streets during the period of roadway reconstruction will adversely affect the neighborhood.
- The sidewalk is inadequate, below road level and often covered with mud or rainwater, obliging pedestrians to walk very near the fast moving traffic on this road to circumvent the obstacles.
- The community is concerned about the prospect of the State Highway Administration detouring traffic through the neighborhood residential streets during the West Montgomery Avenue reconstruction project.

#### 8. Jefferson Street

- Between South Adams and Great Falls Road the roadway surface is unsafe because vehicles rounding the curve lose control and fishtail in rainy or icy/snowy weather.
- On Jefferson between South Washington Street and South Adams Street, the NPAG has expressed concern for pedestrian safety with regard to the narrow sidewalks and no separation from the road.



9. North Street

- North Street running east from Van Buren is substandard in width.

10. Beall Avenue

- Walkways used by school children are in poor condition and are not well separated from traffic. Due to high speed traffic which travels along Beall Avenue, this is a dangerous situation for pedestrians.

11. Anderson Avenue

- Pedestrian passage is hazardous due to no sidewalks and heavy cut-through traffic.

12. Carr Avenue west of Mannakee Street

- Pedestrian passage is hazardous due to no sidewalks and heavy cut-through traffic.

13. Dawson Street

- Pedestrian passage is hazardous due to no sidewalk and fast moving traffic.

14. Forest Avenue

- Pedestrian passage is hazardous due to poorly maintained sidewalks and heavy cut-through traffic.

15. Forest Avenue extension to Rockville Municipal Swim Center

- The pathway through the wooded area between Beall Elementary school and Welsh Park is unsafe.

16. Harrison Street

- Pedestrian passage is often hazardous due to fast moving vehicles.

17. Laird Street

- Pedestrian passage is hazardous due to poorly maintained sidewalks, heavy cut-through traffic, and intersection traffic.

18. Lynch Street

- Pedestrian passage is hazardous due to no sidewalks and heavy cut-through traffic.

19. Lynch Street extension to Welsh Park

- The pathway through the wooded area between Beall Elementary School and Welsh Park is unsafe and impassable during rainy weather.

20. Luckett Street

- Pedestrian passage is hazardous due to no sidewalks and heavy cut-through traffic.

21. Mannakee Street

- Pedestrian passage is hazardous due to no sidewalks and fast moving traffic.

22. Middle Lane

- Pedestrian passage is hazardous due to no sidewalks and heavy cut-through traffic.

23. Nelson Street

- The sidewalk along this busy roadway is mostly complete except for the segment along Woodley Gardens Park.

24. North Van Buren Street

- Pedestrian passage is hazardous due to an inadequate sidewalk and heavy cut-through traffic.

24. South Adams Street

- The sidewalk is incomplete between Jefferson Street and West Montgomery Avenue.

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